

CITY OF JONESTOWN, TEXAS

SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR THE CONSTRUCTION OF

City of Jonestown

2024 Street Maintenance Project

Prepared By



KASBERG, PATRICK & ASSOCIATES, LP
CONSULTING ENGINEERS
Firm Registration No. F-510

A handwritten signature in blue ink, appearing to read 'Alvin R. Sutton, III', written over a horizontal line.

March 22, 2024



April 2024

2024 Street Maintenance Project

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CITY OF JONESTOWN

CONFLICT OF INTEREST DISCLOSURE

IMPORTANT NOTICE TO VENDORS AND BIDDERS – STATE LAW

State law (Chapter 176 of the Local Government Code) requires the filing of Conflict of Interest Questionnaires by certain individuals and businesses.

The questionnaires require disclosure describing certain business and gift giving relationships, if any, the filers may have with Local Government Offices or a member of a governing body of a local government entity.

The law applies to:

- Businesses or individuals who contract with the City,
- Businesses and individuals who seek to contract with the City (regardless of whether a bidder is awarded the contract), and
- Agents who represent such business dealings with the City.

A copy of the required reporting form is attached, **Form CIQ**.

If you have any questions about compliance, please consult your own legal counsel. Compliance is the individual responsibility of each individual, business and agent who is subject to the law's filing requirement.

If you are required to file a Conflict of Interest Questionnaire, you should file it with the Jonestown City Secretary at 18649 FM 1431, Jonestown, TX 78645.

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

Signature of vendor doing business with the governmental entity

Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;
or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

CITY OF JONESTOWN

CERTIFICATE OF INTERESTED PARTIES DISCLOSURE

IMPORTANT NOTICE TO VENDORS AND BIDDERS – STATE LAW

State law (House Bill 1295) required the filing of Certificate of Interested Parties Disclosure (Form 1295) by business entities.

The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

A business entity must use the application to enter the required information on Form 1295 and print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form and have the form notarized. The completed Form 1295 with the certification of filing must be filed with the governmental entity or state agency with which the business entity is entering into the contract.

If you have any questions about compliance, please consult your own legal counsel. Compliance is the individual responsibility of each individual, business or agent who is subject to the law's filing requirement.

If you are required to file a Certificate of Interested Parties, you should file it online with the Texas Ethics Commission: https://ethics.state.tx.us/whatsnew/elf_info_form1295.htm

The City of Jonestown has a Contract Identification Number. For this project, the City of Jonestown Tracking Number is 2024-SMP.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

OFFICE USE ONLY

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party.

6 UNSWORN DECLARATION

My name is _____, and my date of birth is _____.

My address is _____, _____, _____, _____, _____.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in _____ County, State of _____, on the _____ day of _____, 20____.
(month) (year)

 Signature of authorized agent of contracting business entity
 (Declarant)

ADD ADDITIONAL PAGES AS NECESSARY

NOTICE TO BIDDERS

Sealed bids addressed to the Honorable Mayor and City Council will be received in person at the office of Steve Jones, City Administrator, City of Jonestown, City Hall, 18649 FM 1431, Suite 4A, Jonestown, Texas 78645 until 2:00 P.M. on Thursday, April 25, 2024, for the construction of the 2024 Street Maintenance Project in the City of Jonestown, Texas. The bids shall be labeled:

2024 Street Maintenance Project Jonestown, Texas

The project consists of a base bid of furnishing, installing, and providing all labor and materials required for construction of approximately 16,700 square yards of 2" Type D HMAC Mill and Overlay, 400 tons of Type B HMAC Point Repairs, removal and replacement of approximately 50 square yards of concrete valley gutter, and other miscellaneous construction activities.

Bids must be submitted on the Bid Form provided and must be accompanied by a cashier's check, certified check or acceptable bidder's bond payable without recourse to the City of Jonestown, Texas in an amount not less than five (5) percent of the bid submitted as a guarantee that the bidder will enter into a contract and execute a Performance Bond and a Payment Bond within ten (10) days after the notification of the award of the contract.

The bids will be publicly opened and read aloud at City Hall at 2:00 P.M. on Thursday, April 25, 2024. The City Council will officially review the bids at the next regularly scheduled meeting and award the contract as soon thereafter as practical.

The City of Jonestown reserves the right to accept or reject any and all bids, as the best interest of the City may require, and to waive any informality in bids received. The City of Jonestown also reserves the right to award the Contract as may be advantageous to the City.

Plans, specifications, and bidding documents may be secured beginning Thursday, April 4, 2024.

Bidding Documents are on file and may be examined at the following locations:

- On-line at <http://www.civcastusa.com>. Documents may be downloaded or viewed free of charge at this website. It is the bidder's responsibility to determine that a complete set of documents as defined in the Instructions to Bidders is received.
- At the office of Kasberg, Patrick & Associates, LP; (512) 819-9478; 800 South Austin Avenue; Georgetown, Texas 78626. Bidding Documents may be obtained upon payment to the Engineer, accompanied with a check in the amount of **\$100.00** per set, which is not refundable.

A **non-mandatory** pre-bid video conference for this project will be held on Tuesday, April 16, 2024, at 10:00 am. To attend pre -bid use the Microsoft Teams link provided below. The project site will be available for inspection by prospective bidders immediately following the pre-bid conference.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 253 069 885 370

Passcode: VMNVnd

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 806-368-4374,,414708488#](#) United States, Lubbock

Phone Conference ID: 414 708 488#

Publication Dates:

Hill Country News:

April 4, 2024

April 11, 2024

CITY OF JONESTOWN, TEXAS

Steve Jones
City Administrator

SPECIAL PROJECT INFORMATION
TO BIDDERS/CONTRACTORS

- A. All questions and inquiries about the project should be directed to Trae Sutton, P.E., until 12:00 P.M. (noon) on Friday, April 19, 2024. Questions after that time and date will not be addressed and the Engineer and/or Owner shall not be bound by any references or dates obtained by the Bidders unless an official addendum is produced and released by Kasberg, Patrick & Associates, LP.
- B. Daily, on-site construction representation and observation will be provided by the City of Jonestown.
- C. Contract Administration and Pay Estimate Approvals will be provided by the City of Jonestown Public Works Department.
- D. Bid Items for Mobilization, Bonds and Insurance shall not exceed 5% of the total amount Bid for any particular Section of the Bid Submitted.
- E. A tabulation of the streets to receive a mill & overlay is located in the Construction Plans.

INSTRUCTION TO BIDDERS FOR CONSTRUCTION

1. Use of Separate Bid Forms

These contract documents include a complete set of bid and contract forms which are for the convenience of the bidders and are not to be detached from the contract documents, completed or executed. Separate bid forms will be provided for your use.

2. Interpretations or Addenda

Each request for an interpretation shall be made by the Engineer. Each interpretation made will be in the form of an Addendum to the contract documents and will be distributed to all parties holding contract documents no less than one (1) day prior to the bid opening. It is, however, the bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda, whether or not received by the bidder.

3. Inspection of Site

Each bidder should visit the site of the proposed work and fully acquaint their selves with the existing conditions there and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the contract. The bidder should thoroughly examine and familiarize himself with the drawings, technical specifications and all other contract documents. The contractor, by the execution of the contract, shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal document or to visit the site or acquaint himself with the conditions there existing. The City will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

4. Bids

- a) All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including only Drawings.
- b) All bids must be regular in every respect and no interlineation, excisions or special conditions may be made or included by the bidder.
- c) The City may consider as irregular any bid on which there is an alteration of or departure from the bid form and, at its option, may reject any irregular bid.
- d) If contract is awarded, it will be awarded to a responsible bidder on the basis of the lowest/best bid and the selected alternate bid items, if any. The contract will require the completion of the work in accordance with the contract documents.

5. Bid Bond

- a) A bid bond in the amount of 5% of the bid issued by the acceptable surety shall be submitted with each bid. A certified check or bank draft payable to the City may be submitted in lieu of the Bid Bond.
- b) The bid bond, or its comparable, will be returned to the bidder as soon as practical after the opening of the bids.

6. Unit Price

The unit price for each of the several items in the bid shall include its pro rata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as informal. Special attention is drawn to this condition, as the unit prices will be used to determine the amount of any change orders resulting from an increase or decrease in quantities.

7. Corrections

Erasures or other corrections in the bid must be noted over the signature of the bidder.

8. Time for Receiving Bids

Bids received prior to the advertised hour of opening will be kept securely sealed. The officer appointed to open the bids shall decide when he specified time has arrived and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to satisfaction of the City that the late arrival of the bid was solely due to delay in the mail for which the bidder was not responsible, such bid will be received and considered.

9. Opening of Bids

The City shall, at the time and place fixed for the opening of bids, open each bid and publicly read it aloud, irrespective of any irregularities therein. Bidders and other interested individuals may be present.

10. Withdrawal of Bids

Bidder may withdraw the bid before the time fixed for the opening of bids, by communicating his purpose in writing to the City. Upon receipt of such notice, the unopened bid will be returned to the bidder. The bid guaranty of any bidder withdrawing his bid will be returned promptly.

11. Award of Contract/Rejection of Bids

- a) The contract will be awarded to the responsive, responsible Bidder submitting the lowest/best bid. The bidder selected will be notified at the earliest possible date. The City reserves the right to reject any or all bids and to waive any informality in bids received where such rejection or waiver is in its interest.

12. Execution of Agreement/Performance and Payment Bonds

- a) The failure of the successful bidder to execute the agreement and supply the required bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the City may grant, shall constitute a default and the City may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the City may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against the City for a refund.

BID FORM

PROJECT IDENTIFICATION: City of Jonestown
2024 Street Maintenance Project

THIS BID IS SUBMITTED TO: City of Jonestown
18649 FM 1431, Suite 4A
Jonestown, TX 78645

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for sixty (60) days after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within ten days after the date of OWNER's Notice of Award.

3. In submitting this bid, BIDDER represents, as more fully set forth in the Agreement, that:

a. BIDDER has examined copies of all the Bidding Documents and of the following addenda (receipt of all which is hereby acknowledged):

Number	Date	Name

b. BIDDER has familiarized their self with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

- c. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies which pertain to the subsurface of physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work as BIDDER considers necessary for the performance or finishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 8 of the Agreement; and no additional examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by BIDDER for such purposes.

- d. BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumed responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 8 of the Agreement.

- e. BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

- f. BIDDER has given OWNER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to BIDDER.

- g. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.

4. BIDDER will complete work for the following prices:

BID FORM

2024 Street Maintenance Project

Item Code		Approx. Quantity	Unit	Description and Unit Price in Words	Unit Price	Total Amount (in numerals)
Desc. Code	Item No.					
1		100%	LS	Mobilization, Bonds & Insurance (not-to-exceed 5% Bid Part), Complete For <div style="text-align: right;">_____ Dollars and _____ Cents per Lump Sum.</div>	\$ _____	\$ _____
2		100%	LS	Implement Standard TxDOT Traffic Control Plan, Complete For <div style="text-align: right;">_____ Dollars and _____ Cents per Lump Sum.</div>	\$ _____	\$ _____
3		16,750	SY	For 1.5" Mill & Overlay (TXDOT Item 3076, D-GR, TY-D PG 76-22), Complete For <div style="text-align: right;">_____ Dollars and _____ Cents per Square Yard.</div>	\$ _____	\$ _____
4		75	TN	Furnish & Install TXDOT Item 3076, D-GR, TY-D PG 76-22 Patch, Spot Level Up Along Roadway Edge, Complete For <div style="text-align: right;">_____ Dollars and _____ Cents per Ton.</div>	\$ _____	\$ _____
5		200	TN	Furnish & Install 4" TXDOT Item 3076, D-GR, TY-B PG 76-22, Including Excavation and Prime Coat for Point Repairs, Complete For <div style="text-align: right;">_____ Dollars and _____ Cents per Ton.</div>	\$ _____	\$ _____

BID FORM

2024 Street Maintenance Project

Item Code		Approx. Quantity	Unit	Description and Unit Price in Words	Unit Price	Total Amount (in numerals)
Desc. Code	Item No.					
6		35	SY	Removal of Existing Concrete Valley Gutters, Complete For _____ Dollars and _____ Cents per Square Yard.	\$ _____	\$ _____
7		55	SY	Furnish & Install 10' Concrete Valley Gutter, Complete For _____ Dollars and _____ Cents per Square Yard.	\$ _____	\$ _____

Total Bid (Items 1 - 7): \$ _____

Total Bid (In Words):

BID SUMMARY

TOTAL BID: \$ _____

5. BIDDER agrees that all Work on each project will be substantially complete and ready for final payment by the dates indicated in the Agreement. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

6. The following documents are attached to and made a condition of this Bid:
 - A. Required Bid Security in the form of five percent of the Bidder's maximum base bid price and in the form of certified check of a Bid Bond.

7. Communications concerning this Bid shall be addressed to:

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

SUBMITTED ON _____, 2024

If BIDDER is:

An Individual

By: _____ (SEAL)
(Individual's Name)

Doing business as: _____

Business address: _____

Phone No.: _____

A Partnership

By: _____
(Firm Name)

(General Partner)

Business address: _____

Phone No.: _____

A Corporation

By: _____

By: _____
(Corporation Name)

(State of Incorporation)

By: _____
(Name of Person Authorized to Sign)

(Corporate Seal)

(Title)

Attest: _____
(Secretary)

Business address: _____

Phone No.: _____

A Joint Venture

By: _____
(Name)

Business address: _____

Phone No.: _____

By: _____
(Name)

Business address: _____

Phone No.: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

END OF SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____ as Principal,
and _____ as
Surety, are hereby held and firmly bound unto The City of Jonestown, Texas as OWNER in the
penal sum of _____ for payment
of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and
assigns.

SIGNED, this _ day of _____, _____. The Condition of the above obligation is such
that whereas the Principal has submitted to _____ a certain
BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

2024 Street Maintenance Project

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

THE SURETY, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)

Principal

Surety

By: _____

Address: _____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

END OF SECTION

STANDARD FORM OF AGREEMENT

STATE OF TEXAS

COUNTY OF _____ }
}

THIS AGREEMENT, made and entered into this _____ day of _____, 2018, by and between _____ The City of Jonestown, Texas _____ of the County of _____ Travis and State of Texas, acting through Steve Jones, City Administrator thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and _____ of the City of _____, County of _____ and State of _____, Party of the Second Part, Hereinafter termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows:

2024 Street Maintenance Project

and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at his (or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to Contractors, General and Special Conditions of Agreement, Plans and other drawings and printing or written explanatory matter thereof, and the Specifications and addenda therefor, as prepared by Kasberg, Patrick & Associates, LP, 800 South Austin Avenue, Georgetown, Texas, 78626, (512) 819-9478, herein entitled the ENGINEER, each of which has been identified by the CONTRACTOR and the ENGINEER, together with the CONTRACTOR'S written Proposal, the General Conditions of the Agreement, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

The CONTRACTOR agrees to commence work within ten (10) days after the date written notice to do so shall have been given him, and to complete construction as required in the contract, subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this contract, such payments to be subject to the General and Special Conditions of the contract.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

City of Jonestown
Party of the First Part (OWNER)

Party of the Second Part (CONTRACTOR)

By: _____
Steve Jones, City Administrator

By: _____
Title: _____

ATTEST:

PERFORMANCE BOND

STATE OF TEXAS

COUNTY OF _____ }
_____ }

KNOW ALL MEN BY THESE PRESENTS: That _____
of the City of _____, County of _____ and State of
_____ as principal, and _____
_____ authorized under the laws of the State of Texas to act as surety on bonds for
principals, are held and firmly bound unto _____ The City of Jonestown, Texas
(OWNER), in the penal sum of _____ Dollars (\$ _____
_____) for the payment whereof, the said Principal and Surety bind themselves,
and their heirs, administrators, executors, successors and assigns, jointly and severally, by these
presents:

WHEREAS, the Principal has entered into a certain written contract with the OWNER,
dated the _____ day of _____, _____, to construct

2024 Street Maintenance Project

which contract is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the
said Principal shall faithfully perform said Contract and shall in all respects duly and faithfully
observe and perform all and singular the covenants, conditions and agreements in and by said
contract agreed and covenanted by the Principal to be observed and performed, and according to the
true intent and meaning of said Contract and the Plans and Specifications hereto annexed, then this
obligation shall be void; otherwise to remain in full force and effect;

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of (Article
5160 for Public Work) (Article 5472d for private Work)* of the Revised Civil Statutes of Texas as
amended and all liabilities on this bond shall be determined in accordance with the provisions of
said Article to the same extent as if it were copies at length herein."

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

* Not applicable for federal work. See "The Miller Act," 40 U.S.C. S270

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, _____.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

The name and address of the Resident Agent of Surety is:

PAYMENT BOND

STATE OF TEXAS

COUNTY OF _____ }
}

KNOW ALL MEN BY THESE PRESENTS: That _____
of the City of _____ County of _____ and State of _____
as principal, and _____
authorized under the laws of the State of Texas to act as surety on bonds for principals, are held
and firmly bound unto _____ The City of Jonestown, Texas _____ (OWNER), in the penal sum
of _____ Dollars (\$ _____
_____) for the payment whereof, the said Principal and Surety bind themselves and their
heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract with the OWNER,
dated the _____ day of _____, _____, to construct:

2024 Street Maintenance Project

which contract is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the
said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the
prosecution of the work provided for in said contract, then, this obligation shall be void; otherwise
to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Article
5160 of the Revised Civil Statutes of Texas as amended and all liabilities on this bond shall be
determined in accordance with the provisions of said Article to the same extent as if it were copied
at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anywise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

IN WITNESS whereof, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, _____.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

The name and address of the Resident Agent of Surety is:

CERTIFICATE OF INSURANCE

THIS CERTIFICATE IS ISSUED FOR THE DURATION OF THE PROJECT AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES LISTED BELOW.

NAME AND ADDRESS OF AGENCY	COMPANIES AFFORDING COVERAGES COMPANY A <u>LETTER</u> COMPANY B <u>LETTER</u> COMPANY C <u>LETTER</u> COMPANY D <u>LETTER</u> COMPANY E <u>LETTER</u>
NAME AND ADDRESS OF INSURED	COMPANY C <u>LETTER</u> COMPANY D <u>LETTER</u> COMPANY E <u>LETTER</u>

This is to certify that policies of insurance listed below have been issued to the insured named above and are in force at this time. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	POLICY EXPIRATION DATE	LIMITS OF LIABILITY IN THOUSANDS (000)		
					EACH OCCURRENCE	AGGREGATE
_____	GENERAL LIABILITY ___ Comprehensive Form Premises-Operations ___ Explosions and Collapse Hazard ___ Underground Hazard ___ Products/Completed Operations Hazard ___ Contractual Insurance ___ Broad Form Property Damage ___ Independent Contractors ___ Personal Injury			Bodily Injury	\$	\$
				Property Damage	\$	\$
				Bodily Injury and Property Damage Combined	\$	\$
				Personal Injury		\$

_____	AUTOMOBILE LIABILITY ___ Comprehensive Form ___ Owned ___ Hired ___ Non-Owned			Bodily Injury (Each Person)	\$
				Bodily Injury (Each Accident)	\$
				Property Damage	\$
				Bodily Injury and Property Damage Combined	\$
_____	EXCESS LIABILITY ___ Umbrella Form ___ Other than Umbrella				
_____	WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY			Statutory	
					\$ (Each Account)

OTHER _____

Builders Risk _____

Description of Operations/
Locations/Vehicles PROJECT TITLE: 2024 Street Maintenance Project

PROJECT LOCATION: _____ Jonestown, Texas

The City of Jonestown, the Engineer, Kasberg, Patrick & Associates, LP, and the State of Texas are named as additional insureds under all insurance, other than Workman's Compensation.

Cancellation: No policies will be cancelled or reduced, restricted, or limited until ten (10) days after the owner has received written notice as evidence by return receipt or registered or certified letter.

NAME AND ADDRESS OF CERTIFICATE HOLDER:

DATE ISSUED: _____, _____ AUTHORIZED REPRESENTATIVE

END OF SECTION

Notice of Award

Date: _____

Project: **2024 Street Maintenance Project**

Owner: City of Jonestown, Texas

Owner's Contract No.:

Contract: **2024 Street Maintenance Project**

Engineer's Project No.: 2023-184

Successful Bidder:

Bidder's Address:

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for:

2024 Street Maintenance Project

The amount of your Contract is _____
(\$ _____).

3 copies of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

5 sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within [15] days of the date you receive this Notice of Award.

1. Deliver to the Owner [3] fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Instructions to Bidders, General Conditions, and Supplementary Conditions.
3. Other conditions precedent:

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

City of Jonestown

Authorized Signature

By: _____

Title: _____

Notice to Proceed

Date: _____

Contract: **2024 Street Maintenance Project**

Engineer's Project No.: 2023-184-20

To: _____

In accordance with the Agreement dated _____, by and between the City of Jonestown, Texas (Owner) and _____ (Contractor) for work to be performed in conjunction with the **2024 Street Maintenance Project**.

1. Contractor is hereby notified to commence work on _____ and to complete the work on or before _____.
2. Liquidated damages to be paid by the Contractor for failure to complete the work by the completion date will be assessed at the rate of \$ 500.00 per day for each calendar day after _____. The procedure and basis for the assessment of damages will be in accordance with the Special Conditions, Section 21.

ISSUED ON BEHALF OF

ACCEPTED ON BEHALF OF

The City of Jonestown, Texas

Steve Jones
City Administrator

(Contractor Signature)

Date

Date

GENERAL CONDITIONS

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FOR

GENERAL CONDITIONS OF AGREEMENT

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GENERAL CONDITIONS OF AGREEMENT

1. DEFINITIONS OF TERMS

1.01 ... OWNER, CONTRACTOR AND ENGINEER. The OWNER, the CONTRACTOR and the ENGINEER are those persons or organizations identified as such in the Agreement and are referred to throughout the Contract Documents as if singular in number and masculine in gender. The term ENGINEER means the ENGINEER or his duly authorized representative. The ENGINEER shall be understood to be the ENGINEER of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the ENGINEER and the CONTRACTOR.

1.02 ... CONTRACT DOCUMENTS. The Contract Documents shall consist of the Notice to Contractors (Advertisement), Special Conditions (Instructions to Bidders), Proposal, signed Agreement, Performance and Payment Bonds (when required), Special Bonds (when required), General Conditions of the Agreement, Technical Specifications, Plans, and all modifications thereof incorporated in any of the documents before the execution of the agreement.

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflict between any of the Contract Documents, priority of interpretation shall be in the following order: Signed Agreement, Performance and Payment Bonds, Special Bonds (if any), Proposal, Special Conditions of Agreement, Notice to Contractors, Technical Specifications, Plans, and General Conditions of Agreement.

1.03 ... SUB-CONTRACTOR. The term Sub-Contractor, as employed herein, includes only those having a direct contract with the CONTRACTOR and it includes one who furnishes material worked to a special design according to the plans or specifications of this work, but does not include one who merely furnishes material not so worked.

1.04 ... WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

1.05 ... WORK. The CONTRACTOR shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, services, insurance, and all water, light, power, fuel, transportation and other facilities necessary for the execution and completion of the work covered by the Contract Documents. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of a good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials. Materials or work described in words, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standards.

1.06 ... EXTRA WORK. The term "Extra Work" as used in this contract shall be understood to mean and include all work that may be required by the ENGINEER or OWNER to be done by the CONTRACTOR to accomplish any change, alteration or addition to the work

shown upon the plans, or reasonably implied by the specifications, and not covered by the CONTRACTOR'S Proposal, except as provided under "Changes and Alterations", herein.

1.07 ... WORKING DAY. A "Working Day" is defined as any day not including Saturdays, Sundays or any legal holidays, in which weather or other conditions, not under the control of the CONTRACTOR, will permit construction of the principal units of the work for a period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m.

1.08 ... CALENDAR DAY. "Calendar Day" is any day of the week or month, no days being excepted.

1.09 ... SUBSTANTIALLY COMPLETED. By the term "substantially completed" is meant that the structure has been made suitable for use or occupancy or the facility is in condition to serve its intended purpose, but still may require minor miscellaneous work and adjustment.

2. RESPONSIBILITIES OF THE ENGINEER AND THE CONTRACTOR

2.01 ... OWNER - ENGINEER RELATIONSHIP. The ENGINEER will be the OWNER'S representative during construction. The duties, responsibilities and limitations of authority of the ENGINEER as the OWNER'S representative during construction are as set forth in the Contract Documents and shall not be extended or limited without written consent of the OWNER and ENGINEER. The ENGINEER will advise and consult with the OWNER, and all of OWNER'S instructions to the CONTRACTOR shall be issued through the ENGINEER.

2.02 ... PROFESSIONAL INSPECTION BY ENGINEER. The ENGINEER shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the ENGINEER shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the ENGINEER shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR'S or subcontractor's agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the work.

2.03 ... PAYMENTS FOR WORK. The ENGINEER shall review CONTRACTOR'S applications for payment and supporting data, determine the amount owed to the CONTRACTOR and approve, in writing, payment to CONTRACTOR in such amounts; such approval of payment to CONTRACTOR constitutes a representation to the OWNER of ENGINEER'S professional judgment that the work has progressed to the point indicated to the best of his knowledge, information and belief, but such approval of an application for payment to CONTRACTOR shall not be deemed as a representation by ENGINEER that ENGINEER has

made any examination to determine how or for what purpose CONTRACTOR has used the moneys paid on account of the Contract price.

2.04 ... INITIAL DETERMINATIONS. The ENGINEER initially shall determine all claims, disputes and other matters in question between the CONTRACTOR and the OWNER relating to the execution or progress of the work or the interpretation of the Contract Documents and the ENGINEER'S decision shall be rendered in writing within a reasonable time. Should the ENGINEER fail to make such decision within a reasonable time, appeal to arbitration may be taken as if his decision had been rendered against the party appealing.

2.05 ... OBJECTIONS. In the event the ENGINEER renders any decision which, in the opinion of either party hereto, is not in accordance with the meaning and intent of this contract, either party may file with the ENGINEER within thirty days his written objection to the decision, and by such action may reserve the right to submit the question so raised to arbitration as hereinafter provided.

2.06 ... LINES AND GRADES. Unless otherwise specified, all lines and grades shall be furnished by the ENGINEER or his representative. Whenever necessary, construction work shall be suspended to permit performance of this work, but such suspension will be as brief as practicable and the CONTRACTOR shall be allowed no extra compensation therefor. The CONTRACTOR shall give the ENGINEER ample notice of the time and place where lines and grades will be needed. All stakes, marks, etc., shall be carefully preserved by the CONTRACTOR, and in case of careless destruction or removal by him or his employees, such stakes, marks, etc., shall be replaced at the CONTRACTOR'S expense.

2.07 ... CONTRACTOR'S DUTY AND SUPERINTENDENCE. The CONTRACTOR shall give adequate attention to the faithful prosecution and completion of this contract and shall keep on the work, during its progress, a competent superintendent and any necessary assistants. The superintendent shall represent the CONTRACTOR in his absence and all directions given to him shall be as binding as if given to the CONTRACTOR.

The CONTRACTOR is and at all times shall remain an independent contractor, solely responsible for the manner and method of completing his work under this contract, with full power and authority to select the means, method and manner of performing such work, so long as such methods do not adversely affect the completed improvements, the OWNER and ENGINEER being interested only in the result obtained and conformity of such completed improvements to the plans, specifications and contract.

Likewise, the CONTRACTOR shall be solely responsible for the safety of himself, his employees and other persons, as well as for the protection of the safety of the improvements being erected and the property of himself or any other person, as a result of his operations hereunder. Engineering construction drawings and specifications as well as any additional information concerning the work to be performed passing from or through the ENGINEER shall not be interpreted as requiring or allowing CONTRACTOR to deviate from the plans and specifications, the intent of such drawings, specifications and any other such instructions being to define with particularity the agreement of the parties as to the work the CONTRACTOR is to perform. CONTRACTOR shall be fully and completely liable, at his own expense, for design, construction, installation and use, or non-use of all items and methods incident to performance of the contract, and for all loss, damage or injury incident thereto, either to person or property,

including, without limitation, the adequacy of all temporary supports, shoring, bracing, scaffolding, machinery or equipment, safety precautions or devices, and similar items or devices used by him during construction.

Any review of work in process, or any visit or observation during construction, or any clarification of plans and specifications, by the ENGINEER, or any agent, employee, or representative of either of them, whether through personal observation on the project site or by means of approval of shop drawings for temporary construction on construction processes, or by other means or method, is agreed by the CONTRACTOR to be for the purpose of observing the extent and nature of work completed or being performed, as measured against the drawings and specifications constituting the contract, or for the purpose of enabling CONTRACTOR to more fully understand the plans and specifications so that the completed construction work will conform thereto, and shall in no way relieve the CONTRACTOR from full and complete responsibility for the proper performance of his work on the project, including but without limitation the propriety of means and methods of the CONTRACTOR in performing said contract, and the adequacy of any designs, plans or other facilities for accomplishing such performance. Deviation by the CONTRACTOR from plans and specifications that may have been in evidence during any such visitation or observation by the ENGINEER, or any of his representatives, whether called to the CONTRACTOR'S attention or not shall in no way relieve CONTRACTOR from his responsibility to complete all work in accordance with said plans and specifications.

2.08 ... CONTRACTOR'S UNDERSTANDING. It is understood and agreed that the CONTRACTOR has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this contract. No verbal agreement or conversation with any officer, agent or employee of the OWNER or ENGINEER either before or after the execution of this contract, shall affect or modify any of the terms or obligations herein contained.

2.09 ... CHARACTER OF WORKMEN. The CONTRACTOR agrees to employ only orderly and competent men, skillful in the performance of the type of work required under this contract, to do the work; and agrees that whenever the ENGINEER shall inform him in writing that any man or men on the work are, in his opinion, incompetent, unfaithful or disorderly, such man or men shall be discharged from the work and shall not again be employed on the work without the ENGINEER'S written consent.

2.10 ... CONTRACTOR'S BUILDINGS. The building of structures for housing men, or the erection of tents or other forms of protection, will be permitted only at such places as the ENGINEER shall direct, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in a manner satisfactory to the ENGINEER.

2.11 ... SANITATION. Necessary sanitary conveniences for the use of laborers on the work, properly secluded from public observation, shall be constructed and maintained by the CONTRACTOR in such a manner and at such points as shall be approved by the ENGINEER, and their use shall be strictly enforced.

2.12 ... SHOP DRAWINGS. The CONTRACTOR shall submit to the ENGINEER, with such promptness as to cause no delay in his own work or in that of any other Contractor, four checked copies, unless otherwise specified, of all shop and/or setting drawings and schedules required for the work of the various trades, and the ENGINEER shall pass upon them with reasonable promptness, making desired corrections. The CONTRACTOR shall make any corrections required by the ENGINEER; file with him two corrected copies and furnish such other copies as may be needed. The ENGINEER'S approval of such drawings or schedules shall not relieve the CONTRACTOR from responsibility for deviations from drawings or specifications, unless he has in writing called the ENGINEER'S attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings or schedules. It shall be the CONTRACTOR'S responsibility to fully and completely review all shop drawings to ascertain their effect on his ability to perform the required contract work in accordance with the plans and specifications and within the contract time.

Such review by the ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformity with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor as previously set forth, it being expressly understood and agreed that the ENGINEER does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules, or any means or methods reflected thereby, in relation to the safety of either person or property during CONTRACTOR'S performance hereunder.

2.13 ... PRELIMINARY APPROVAL. The ENGINEER shall not have the power to waive the obligations of this contract for the furnishing by the CONTRACTOR of good material, and of his performing good work as herein described, and in full accordance with the plans and specifications. No failure or omission of the ENGINEER to discover, object to or condemn any defective work or material shall release the CONTRACTOR from the obligations to fully and properly perform the contract, including without limitations, the obligation to at once tear out, remove and properly replace the same at any time prior to final acceptance upon the discovery of said defective work or material; provided, however, that the ENGINEER shall, upon request of the CONTRACTOR, inspect and accept or reject any material furnished, and in event the material has been once accepted by the ENGINEER, such acceptance shall be binding on the OWNER, unless it can be clearly shown that such material furnished does not meet the specifications for this work.

Any questioned work may be ordered taken up or removed for re-examination, by the ENGINEER, prior to final acceptance, and if found not in accordance with the specifications for said work, all expense of removing, re-examination and replacement shall be borne by the CONTRACTOR, otherwise the expense thus incurred shall be allowed as EXTRA WORK, and shall be paid for by the OWNER; provided that, where inspection or approval is specifically required by the specifications prior to performance of certain work, should the CONTRACTOR proceed with such work without requesting prior inspection or approval he shall bear all expense of taking up, removing, and replacing this work if so directed by the ENGINEER.

2.14 ... DEFECTS AND THEIR REMEDIES. It is further agreed that if the work of any part thereof, or any material brought on the site of the work for use in the work or selected for the same, shall be deemed by the ENGINEER as unsuitable or not in conformity with the specifications, the CONTRACTOR shall, after receipt of written notice thereof from the

ENGINEER, forthwith remove such material and rebuild or otherwise remedy such work so that it shall be in full accordance with this contract.

2.15 ... CHANGES AND ALTERATIONS. The CONTRACTOR further agrees that the OWNER may make such changes and alterations as the OWNER may see fit, in the line, grade, form, dimensions, plans or materials for the work herein contemplated, or any part thereof, either before or after the beginning of the construction, without affecting the validity of this contract and the accompanying Performance and Payment Bonds.

If such changes or alterations diminish the quantity of the work to be done, they shall not constitute the basis for a claim for damages, or anticipated profits on the work that may be dispensed with, except as provided for unit price items under Section 5 "Measurement and Payment." If the amount of work is increased, and the work can fairly be classified under the specifications, such increase shall be paid for according to the quantity actually done and at the unit price, if any, established for such work under this contract, except as provided for unit price items under Section 5 "Measurement and Payment;" otherwise, such additional work shall be paid for as provided under Extra Work. In case the OWNER shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then the OWNER shall recompense the CONTRACTOR for any material or labor so used, and for any actual loss occasioned by such change, due to actual expenses incurred in preparation for the work as originally planned.

3. GENERAL OBLIGATIONS AND RESPONSIBILITIES

3.01 ... KEEPING OF PLANS AND SPECIFICATIONS ACCESSIBLE. The ENGINEER shall furnish the CONTRACTOR with an adequate and reasonable number of copies of all plans and specifications without expense to him, and the CONTRACTOR shall keep one copy of the same constantly accessible on the work, with the latest revisions noted thereon.

3.02 ... OWNERSHIP OF DRAWINGS. All drawings, specifications and copies thereof furnished by the ENGINEER shall not be reused on other work, and, with the exception of the signed contract sets, are to be returned to him on request, at the completion of the work. All models are the property of the OWNER.

3.03 ... ADEQUACY OF DESIGN. It is understood that the OWNER believes it has employed competent engineers and designers. It is, therefore, agreed that the OWNER shall be responsible for the adequacy of the design, sufficiency of the Contract Documents, the safety of the structure and the practicability of the operations of the completed project; provided the CONTRACTOR has complied with the requirements of the said Contract Documents, all approved modifications thereof, and additions and alterations thereto approved in writing by the OWNER. The burden of proof of such compliance shall be upon the CONTRACTOR to show that he has complied with the said requirements of the Contract Documents, approved modifications thereof and all approved additions and alterations thereto.

3.04 ... RIGHT OF ENTRY. The OWNER reserves the right to enter the property or location on which the works herein contracted for are to be constructed or installed, by such agent or agents as he may elect, for the purpose of inspecting the work, or for the purpose of constructing or installing such collateral work as said OWNER may desire.

3.05 ... COLLATERAL CONTRACTS. The OWNER agrees to provide by separate contract or otherwise, all labor and material essential to the completion of the work specifically excluded from this contract, in such manner as not to delay the progress of the work, or damage said CONTRACTOR, except where such delays are specifically mentioned elsewhere in the Contract Documents.

3.06 ... DISCREPANCIES AND OMISSIONS. It is further agreed that it is the intent of this contract that all work must be done and all material must be furnished in accordance with the generally accepted practice, and in the event of any discrepancies between the separate contract documents, the priority of interpretation defined under "Contract Documents" shall govern. In the event that there is still any doubt as to the meaning and intent of any portion of the contract, specifications or drawings, the ENGINEER shall define which is intended to apply to the work.

3.07 ... EQUIPMENT, MATERIALS AND CONSTRUCTION PLANT. The CONTRACTOR shall be responsible for the care, preservation, conservation, and protection of all materials, supplies, machinery, equipment, tools, apparatus, accessories, facilities, all means of construction, and any and all parts of the work, whether the CONTRACTOR has been paid, partially paid, or not paid for such work, until the entire work is completed and accepted.

3.08 ... DAMAGES. In the event the CONTRACTOR is damaged in the course of the completion of the work by the act, neglect, omission, mistake or default of the OWNER, or of the ENGINEER, or of any other CONTRACTOR employed by the OWNER upon the work, thereby causing loss to the CONTRACTOR, the OWNER agrees that he will reimburse the CONTRACTOR for such loss. In the event the OWNER is damaged in the course of the work by the act, negligence, omission, mistake or default of the CONTRACTOR, or should the CONTRACTOR unreasonably delay the progress of the work being done by others on the job so as to cause loss for which the OWNER becomes liable, then the CONTRACTOR shall reimburse the OWNER for such loss.

3.09 ... PROTECTION AGAINST ACCIDENT TO EMPLOYEES AND THE PUBLIC. The CONTRACTOR shall at all times exercise reasonable precautions for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal safety laws and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America except where incompatible with Federal, State, or Municipal laws or regulations. The CONTRACTOR shall provide such machinery guards, safe walkways, ladders, bridges, gangplanks, and other safety devices. The safety precautions actually taken and their adequacy shall be the sole responsibility of the CONTRACTOR, acting at his discretion as an independent contractor.

3.10 ... PERFORMANCE AND PAYMENT BONDS. Unless otherwise specified, it is further agreed by the parties to this Contract that the CONTRACTOR will execute separate

performance and payment bonds, each in the sum of one hundred (100) percent of the total contract price, in standard forms for this purpose, guaranteeing faithful performance of the work and the fulfillment of any guarantees required, and further guaranteeing payment to all persons supplying labor and materials or furnishing him any equipment in the execution of the Contract, and it is agreed that this contract shall not be in effect until such performance and payment bonds are furnished and approved by the OWNER.

Unless otherwise approved in writing by the OWNER, the surety company underwriting the bonds shall be acceptable according to the latest list of companies holding certificates of authority from the Secretary of the Treasury of the United States.

Unless otherwise specified, the cost of the premium for the performance and payment bonds shall be included in the CONTRACTOR'S proposal.

3.11 ... LOSSES FROM NATURAL CAUSES. Unless otherwise specified, all loss or damage to the CONTRACTOR arising out of the nature of the work to be done, or from the action of the elements, or from any unforeseen circumstance in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work, shall be sustained and borne by the CONTRACTOR at his own cost and expense.

3.12 ... PROTECTION OF ADJOINING PROPERTY. The said CONTRACTOR shall take proper means to protect the adjacent or adjoining property or properties in any way encountered, which might be injured or seriously affected by any process of construction to be undertaken under this Agreement, from any damage or injury by reason of said process of construction; and he shall be liable for any and all claims for such damage on account of his failure to fully protect all adjoining property. The CONTRACTOR agrees to indemnify, save and hold harmless the OWNER and ENGINEER against any claim or claims for damages due to any injury to any adjacent or adjoining property, arising or growing out of the performance of the contract; but any such indemnity shall not apply to any claim of any kind arising out of the existence or character of the work.

3.13 ... PROTECTION AGAINST CLAIMS OF SUB-CONTRACTORS, LABORERS, MATERIALMEN AND FURNISHERS OF MACHINERY, EQUIPMENT AND SUPPLIES. The CONTRACTOR agrees that he will indemnify and save the OWNER and ENGINEER harmless from all claims growing out of the lawful demands of sub-contractors, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. When so desired by the OWNER, the CONTRACTOR shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived. If the CONTRACTOR fails so to do, then the OWNER may at the option of the CONTRACTOR either pay directly any unpaid bills, of which the OWNER has written notice, or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to liquidate any and all such lawful claims until satisfactory evidence is furnished at all liabilities have been fully discharged, whereupon payments to the CONTRACTOR shall be resumed in full, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligation upon the OWNER by either the CONTRACTOR or his Surety.

3.14 ... PROTECTION AGAINST ROYALTIES OR PATENTED INVENTION.

The CONTRACTOR shall pay all royalties and license fees, and shall provide for the use of any design, device, material or process covered by letters patent or copyright by suitable legal agreement with the patentee or owner. The CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright rights and shall indemnify and save the OWNER and ENGINEER harmless from any loss on account thereof, except that the OWNER shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material or process or the product of a particular manufacturer or manufacturers is specified or required by the OWNER; provided however, if choice of alternate design, device, material or process is allowed to the CONTRACTOR, the CONTRACTOR shall indemnify and save OWNER harmless from any loss on account thereof. If the material or process specified or required by the OWNER is an infringement, the CONTRACTOR shall be responsible for such loss unless he promptly gives such information the OWNER.

3.15 ... LAWS AND ORDINANCES. The CONTRACTOR shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations, which in any manner affect the contract or the work, and shall indemnify and save harmless the OWNER and ENGINEER against any claim arising from the violation of any such laws, ordinances, and regulations whether by the CONTRACTOR or his employees, except where such violations are called for by the provisions of the Contract Documents. If the CONTRACTOR observes that the plans and specifications are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in the contract for changes in the work. If the CONTRACTOR performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, he shall bear all costs arising therefrom. In case the OWNER is a body politic and corporate, the law from which it derives its powers, insofar as the same regulates the objects for which, or the manner in which, or the conditions under which the OWNER may enter into contract, shall be controlling, and shall be considered as part of this contract, to the same effect as though embodied herein.

3.16 ... ASSIGNMENT AND SUBLETTING. The CONTRACTOR further agrees that he will retain personal control and will give his personal attention to the fulfillment of this contract and that he will not assign by Power of Attorney, or otherwise, or sublet said contract without the written consent of the ENGINEER, and that no part or feature of the work will be sublet to anyone objectionable to the ENGINEER or the OWNER. The CONTRACTOR further agrees that the subletting of any portion or feature of the work, or materials required in the performance of this contract, shall not relieve the CONTRACTOR from his full obligations to the OWNER, as provided by this Agreement.

3.17 ... INDEMNIFICATION. The CONTRACTOR shall defend, indemnify and hold harmless the OWNER and the ENGINEER and their respective officers, agents and employees, from and against all damages, claims, losses, demands, suits, judgments and costs, including reasonable attorneys' fees and expenses, arising out of or resulting from the performance of the work, provided that any such damages, claim, loss, demand, suit, judgment, cost or expense:

-(1) . . . is attributable to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and

.....(2) . . . is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any one of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

The obligation of the CONTRACTOR under this Paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, drawings, reports, surveys, Change Orders, designs or specifications, or the giving of or the failure to give directions or instructions by the ENGINEER, his agents or employees, provided such giving or failure to give is the primary cause of the injury or damage.

3.18 ... INSURANCE. The CONTRACTOR at his own expense shall purchase, maintain and keep in force such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S operations under the Contract, whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

.....(1) . . . Workmen's compensation claims, disability benefits and other similar employee benefit acts;

.....(2) . . . Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees, and claims insured by usual bodily injury liability coverages;

.....(3) . . . Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees, and claims insured by usual bodily injury liability coverages; and

.....(4) . . . Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

3.18.1 ... CERTIFICATE OF INSURANCE. Before commencing any of the work, CONTRACTOR shall file with the OWNER valid Certificates of Insurance acceptable to the OWNER and the ENGINEER. Such Certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least fifteen days' prior written notice has been given to the OWNER.

The CONTRACTOR shall also file with the OWNER valid Certificates of Insurance covering all sub-contractors.

4. PROSECUTION AND PROGRESS

4.01 ... TIME AND ORDER OF COMPLETION. It is the meaning and intent of this contract, unless otherwise herein specifically provided, that the CONTRACTOR shall be allowed to prosecute his work at such times and seasons, in such order of precedence, and in such manner as shall be most conducive to economy of construction: provided, however, that the

order and the time of prosecution shall be such that the work shall be substantially completed as a whole and in part, in accordance with this contract, the plans and specifications, and within the time of completion designated in the Proposal; provided, also, that when the OWNER is having other work done, either by contract or by his own force, the ENGINEER may direct the time and manner of constructing the work done under this contract, so that conflict will be avoided and the construction of the various works being done for the OWNER shall be harmonized.

The CONTRACTOR shall submit, at such times as may reasonably be requested by the ENGINEER schedules which shall show the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the several parts of the work, and estimated dates of completion of the several parts.

4.02 ... EXTENSION OF TIME. Should the CONTRACTOR be delayed in the completion of the work by any act or neglect of the OWNER or ENGINEER, or of any employee of either, or by other contractors employed by the OWNER, or by changes ordered in the work, or by strikes, lockouts, fires, and unusual delays by common carriers, or unavoidable cause or causes beyond the CONTRACTOR'S control, or by any cause which the ENGINEER shall decide justifies the delay, then an extension of time shall be allowed for completing the work, sufficient to compensate for the delay, the amount of the extension to be determined by the ENGINEER, provided, however, that the CONTRACTOR shall give the ENGINEER prompt notice in writing of the cause of such delay.

4.03 ... HINDRANCES AND DELAYS. No claims shall be made by the CONTRACTOR for damages resulting from hindrances or delays from any cause (except where the work is stopped by order of the OWNER) during the progress of any portion of the work embraced in this contract. In case said work shall be stopped by the act of the OWNER, then such expense as in the judgment of the ENGINEER is caused by such stoppage of said work shall be paid by the OWNER to the CONTRACTOR.

5. MEASUREMENT AND PAYMENT

5.01 ... QUANTITIES AND MEASUREMENTS. No extra or customary measurements of any kind will be allowed, but the actual measured and/or computed length, area, solid contents, number and weight only shall be considered, unless specifically provided.

5.02 ... ESTIMATED QUANTITIES. This agreement, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this contract may differ somewhat from these estimates, and that where the basis for payment under this contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the CONTRACTOR agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually

furnished under this contract and the estimated quantities contemplated and contained in the proposal; provided, however, that in case the actual quantity of any major item should become as much as 20% more than, or 20% less than the estimated or contemplated quantity for such items, then either party to this Agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below 20% of the estimated quantity.

A "Major Item" shall be construed to be any individual bid item incurred in the proposal that has a total cost equal to or greater than five (5) percent of the total contract cost, computed on the basis of the proposal quantities and the contract unit prices.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Agreement, as provided under "Extra Work."

5.03 ... PRICE OF WORK. In consideration of the furnishing of all the necessary labor, equipment and material, and the completion of all work by the CONTRACTOR, and on the completion of all work and of the delivery of all material embraced in this Contract in full conformity with the specifications and stipulations herein contained, the OWNER agrees to pay the CONTRACTOR the prices set forth in the Proposal hereto attached, which has been made a part of this contract. The CONTRACTOR hereby agrees to receive such prices in full for furnishing all material and all labor required for the aforesaid work, also for all expense incurred by him, and for well and truly performing the same and the whole thereof in the manner and according to this Agreement.

5.04 ... PARTIAL PAYMENTS. On or before the 10th day of each month, the CONTRACTOR shall prepare and submit to the ENGINEER for approval or modification a statement showing as completely as practicable the total value of the work done by the CONTRACTOR up to and including the last day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work.

The OWNER shall then pay the CONTRACTOR on or before the 15th day of the current month the total amount of the approved statement, less 10 percent of the amount thereof, which 10 percent shall be retained until final payment, and further less all previous payments and all further sums that may be retained by the OWNER under the terms of this Agreement. It is understood, however, that in case the whole work be near to completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the CONTRACTOR, the OWNER may -- upon recommendation of the ENGINEER -- pay a reasonable and equitable portion of the retained percentage to the CONTRACTOR, or the CONTRACTOR at the OWNER'S option, may be relieved of the obligation to fully complete the work and, thereupon, the CONTRACTOR shall receive payment of the balance due him under the contract subject only to the conditions stated under "Final Payment".

5.05 ... USE OF COMPLETED PORTIONS. The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work or such portions may not have expired but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the CONTRACTOR shall be entitled to such extra compensation, or extension of time, or both, as the ENGINEER may determine.

The CONTRACTOR shall notify the ENGINEER when, in the CONTRACTOR'S opinion, the contract is "substantially completed" and when so notifying the ENGINEER, the CONTRACTOR shall furnish to the ENGINEER in writing a detailed list of unfinished work. The ENGINEER will review the CONTRACTOR'S list of unfinished work and will add thereto such items as the CONTRACTOR has failed to include. The "substantial completion" of the structure or facility shall not excuse the CONTRACTOR from performing all of the work undertaken, whether of a minor or major nature, and thereby completing the structure or facility in accordance with the Contract Documents.

5.06 ... FINAL COMPLETION AND ACCEPTANCE. Within ten (10) days after the CONTRACTOR has given the ENGINEER written notice that the work has been completed, or substantially completed, the ENGINEER and the OWNER shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract Documents, the ENGINEER shall issue to the OWNER and the CONTRACTOR his Certificate of Completion, and thereupon it shall be the duty of the OWNER within ten (10) days to issue a Certificate of Acceptance of the work to the CONTRACTOR or to advise the CONTRACTOR in writing of the reason for non-acceptance.

5.07 ... FINAL PAYMENT. Upon the issuance of the Certificate of Completion, the ENGINEER shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Agreement and shall certify same to the OWNER, who shall pay to the CONTRACTOR on or after the 30th day, and before the 35th day, after the date of the Certificate of Completion, the balance due the CONTRACTOR under the terms of this Agreement, provided he has fully performed his contractual obligations under the terms of this contract; and said payment shall become due in any event upon said performance by the CONTRACTOR. Neither the Certificate of Acceptance nor the final payment, nor any provision in the Contract Documents, shall relieve the CONTRACTOR of the obligation for fulfillment of any warranty which may be required.

5.08 ... PAYMENTS WITHHELD. The OWNER may, on account of subsequently discovered evidence, withhold or nullify the whole or part of any certificate to such extent as may be necessary to protect himself from loss on account of:

-(a)Defective work not remedied
-(b)Claims filed or reasonable evidence indicating probable filing of claims.
-(c)Failure of the CONTRACTOR to make payments properly to subcontractors or for material or labor.
-(d)Damage to another contractor.
-(e)Reasonable doubt that the work can be completed for the unpaid balance of the contract amount.
-(f)Reasonable indication that the work will not be completed within the contract time.

When the above grounds are removed or the CONTRACTOR provides a Surety Bond satisfactory to the OWNER, which will protect the OWNER in the amount withheld, payment shall be made for amounts withheld because of them.

5.09 ... DELAYED PAYMENTS. Should the OWNER fail to make payment to the CONTRACTOR of the sum named in any partial or final statement, when payment is due, then the OWNER shall pay to the CONTRACTOR, in addition to the sum shown as due by such statement, interest thereon at the rate of six (6) percent per annum, unless otherwise specified, from date due as provided under "Partial Payments" and "Final Payments", until fully paid, which shall fully liquidate any injury to the CONTRACTOR growing out of such delay in payment, but the right is expressly reversed to the CONTRACTOR in the event payments be not promptly made, as provided under "Partial Payments", to at any time thereafter treat the contract as abandoned by the OWNER and recover compensation, as provided under "Abandonment of Contract", unless such payments are withheld in accordance with the provisions of "Payments Withheld".

6. EXTRA WORK AND CLAIMS

6.01 ... CHANGE ORDERS. Without invalidating this Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions to the work; such changes will be authorized by Change Order to be prepared by the ENGINEER for execution by the OWNER and the CONTRACTOR. The Change Order shall set forth the basis for any change in contract price, as hereinafter set forth for Extra Work, and any change in contract time which may result from the change.

In the event the CONTRACTOR shall refuse to execute a Change Order which has been prepared by the ENGINEER and executed by the OWNER, the ENGINEER may in writing instruct the CONTRACTOR to proceed with the work as set forth in the Change Order and the CONTRACTOR may make claim against the OWNER for Extra Work involved therein, as hereinafter provided.

6.02 ... MINOR CHANGES. The ENGINEER may authorize minor changes in the work not inconsistent with the overall intent of the Contract Documents and not involving an increase in Contract Price. If the CONTRACTOR believes that any minor change or alteration authorized by the ENGINEER involves Extra Work and entitles him to an increase in the Contract Price, the CONTRACTOR shall make written request to the ENGINEER for a written Field Order.

In such case, the CONTRACTOR by copy of his communication to the ENGINEER or otherwise in writing shall advise the OWNER of his request to the ENGINEER for a written Field Order and that the work involved may result in an increase in the Contract Price.

Any request by the CONTRACTOR for a change in Contract Price shall be made prior to beginning the work covered by the proposed change.

6.03 ... EXTRA WORK. It is agreed that the basis of compensation to the CONTRACTOR for work either added or deleted by a Change Order for which a claim for Extra Work is made shall be determined by one or more of the following methods:

-Method (A) - ... By agreed unit prices; or
-Method (B) - ... By agreed lump sum; or

.....Method (C) - ...If neither Method (A) nor Method (B) be agreed upon before the Extra work is commenced, then the CONTRACTOR shall be paid the “actual field cost” of the work, plus fifteen (15) percent.

In the event said Extra Work be performed and paid for under Method (C), then the provisions of this paragraph shall apply, and the “actual field cost” is hereby defined to include the cost to the CONTRACTOR of all workmen, such as foreman, timekeepers, mechanics and laborers, and materials, supplies, teams, trucks, rentals on machinery and equipment, for the time actually employed or used on such Extra Work, plus actual transportation charges necessarily incurred, together with all power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work, including Social Security, Old Age Benefits and other payroll taxes, and a rateable proportion of premiums on Performance and Payment Bonds and Maintenance Bonds, Public Liability and Property Damage and Workmen’s Compensation and all other insurance as may be required by any law or ordinance or directed by the OWNER or by them agreed to. The ENGINEER may direct the form in which accounts of the “actual field cost” shall be kept and the records of these accounts shall be made available to the ENGINEER. The ENGINEER or OWNER may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used; otherwise these matters shall be determined by the CONTRACTOR. Unless otherwise agreed upon, the prices for the use of machinery and equipment shall be determined by using 100 percent, unless otherwise specified, of the latest schedule of Equipment Ownership Expense adopted by the Associated General Contractors of America. Where practicable the terms and prices for the use of machinery and equipment shall be incorporated in the Written Extra Work Order. The fifteen (15%) percent of the “actual field cost” to be paid the CONTRACTOR shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the “actual field cost” as herein defined, save that where the CONTRACTOR’S Camp or Field Office must be maintained primarily on account of such Extra Work; then the cost to maintain and operate the same shall be included in the “actual field cost”.

No claim for Extra Work of any kind will be allowed unless ordered in writing by the ENGINEER. In case any orders or instructions, either oral or written, appear to the CONTRACTOR to involve Extra Work for which he should receive compensation or an adjustment in the construction time, he shall make written request to the ENGINEER for written order authorizing such Extra Work. Should a difference of opinion arise as to what does or does not constitute Extra Work, or as to the payment therefor, and the ENGINEER insists upon its performance, the CONTRACTOR shall proceed with the work after making written request for written order and shall keep an accurate account of the “actual field cost” thereof, as provided under Method (C). The CONTRACTOR will thereby preserve the right to submit the matter of payment to arbitration, as herein below provided.

6.04 ... TIME OF FILING CLAIMS. It is further agreed by both parties hereto that all questions of dispute or adjustment presented by the CONTRACTOR shall be in writing and filed with the ENGINEER within thirty (30) days after the ENGINEER has given any directions, order or instruction to which the CONTRACTOR desires to take exception. The ENGINEER shall reply within thirty (30) days to such written exceptions by the CONTRACTOR and render his final decision in writing. In case the CONTRACTOR should appeal from the ENGINEER’S decision, any demand for arbitration shall be filed with the ENGINEER and the OWNER in writing within ten (10) days after the date of delivery to CONTRACTOR of the ENGINEER’S

final decision. It is further agreed that final acceptance of the work by the OWNER and the acceptance by the CONTRACTOR of the final payment shall be a bar to any claims by either party, except where noted otherwise in the Contract Documents.

6.05 ... ARBITRATION. All questions of dispute under this Agreement shall be submitted to arbitration at the request of either party to the dispute. The parties may agree upon one arbiter, otherwise, there shall be three, one named in writing by each party, and the third chosen by the two arbiters so selected; or if the arbiters fail to select a third within ten (10) days, he shall be chosen by a District Judge serving the County in which the major portion of the project is located, unless otherwise specified. Should the party demanding arbitration fail to name an arbiter within ten (10) days of the demand, his right to arbitrate shall lapse, and the decision of the ENGINEER shall be final and binding on him. Should the other party fail to choose an arbiter within ten (10) days, the ENGINEER shall appoint such arbiter. Should either party refuse or neglect to supply the arbiters with any papers or information demanded in writing, the arbiters are empowered by both parties to take ex parte proceedings.

The arbiters shall act with promptness. The decision of any two shall be binding on both parties to the contract. The decision of the arbiters upon any question submitted to arbitration under this contract shall be a condition precedent to any right of legal action. The decision of the arbiter or arbiters may be filed in court to carry it into effect.

The arbiters, if they deem the case demands it, are authorized to award the party whose contention is sustained, such sums as they deem proper for the time, expense and trouble incident to the appeal, and if the appeal was taken without reasonable cause, they may award damages for any delay occasioned thereby. The arbiters shall fix their own compensation, unless otherwise provided by agreement, and shall assess the cost and charges of the arbitration upon either or both parties. The award of the arbiters must be made in writing.

7. ABANDONMENT OF CONTRACT

7.01 ... ABANDONMENT BY CONTRACTOR. In case the CONTRACTOR should abandon and fail or refuse to resume work within ten (10) days after written notification from the OWNER, or the ENGINEER, or if the CONTRACTOR fails to comply with the orders of the ENGINEER, when such orders are consistent with the Contract Documents, then, and in that case, where performance and payment bonds exist, the Sureties on these bonds shall be notified in writing and directed to complete the work, and a copy of said notice shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the CONTRACTOR.

After receiving said notice of abandonment, the CONTRACTOR shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job; but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the OWNER or Surety on the performance bond, or another contractor in completion of the work; and the CONTRACTOR shall not receive any rental or credit therefor (except when used in Work and Claims), it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

Where there is no performance bond provided or in case the Surety should fail to commence compliance with the notice for completion herein before provided for, within ten (10) days after service of such notice, then the OWNER may provide for completion of the work in either of the following elective manners:

7.01.1 The OWNER may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as said OWNER may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to said CONTRACTOR, and expense so charged shall be deducted and paid by the OWNER out of such moneys as may be due, or that may thereafter at any time become due to the CONTRACTOR under and by virtue of this Agreement. In case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the CONTRACTOR, then said CONTRACTOR shall receive the difference. In case such expense is greater than the sum which would have been payable under this contract, if the same had been completed by said CONTRACTOR, then the CONTRACTOR and/or his Surety shall pay the amount of such excess to the OWNER; or

7.01.2 The OWNER under sealed bids, after five (5) days' notice published one or more times in a newspaper having general circulation in the county of the location of the work, may let the contract for the completion of the work under substantially the same terms and conditions which are provided in this contract. In case any increase in cost to the OWNER under the new contract as compared to what would have been the cost under this contract, such increase shall be charged to the CONTRACTOR and Surety shall be and remain bound therefor. However, should the cost to complete any such contract prove to be less than what would have been the cost to complete under this contract, the CONTRACTOR and/or his Surety shall be credited therewith.

When the work shall have been substantially completed the CONTRACTOR and his Surety shall be so notified and Certificates of Completion and Acceptance, as provided in Paragraph 5.06 hereinabove, shall be issued. A complete itemized statement of the contract accounts, certified to by the ENGINEER as being correct, shall then be prepared and delivered to the CONTRACTOR and his Surety, whereupon the CONTRACTOR and/or his Surety, or the OWNER as the case may be, shall pay the balance due as reflected by said statement, within fifteen (15) days after the date of such completion.

In the event the statement of accounts shows that the cost to complete the work is less than that which would have been the cost to the OWNER had the work been completed by the CONTRACTOR under the terms of this contract; or when the CONTRACTOR and/or his Surety shall pay the balance shown to be due by them to the OWNER, then all machinery, equipment, tools, materials or supplies left on the site of the work shall be turned over to the CONTRACTOR and/or his Surety. Should the cost to complete the work exceed the contract price, and the CONTRACTOR and/or his Surety fail to pay the amount due the OWNER within the time designated hereinabove, and there remains any machinery, equipment, tools materials or supplies on the site of the work, notice thereof, together with an itemized list of such equipment and materials shall be mailed to the CONTRACTOR and his Surety at the respective addresses designated in this contract, provided, however, that actual written notice given in any manner will satisfy this condition. After mailing, or other giving of such notice, such property shall be held at the risk of the CONTRACTOR and his Surety subject only to the duty of the OWNER to

exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice, the OWNER may sell such machinery, equipment, tools, materials or supplies and apply the net sum derived from such sale to the credit of the CONTRACTOR and his Surety. Such sale may be made at either public or private sale, with or without notice, as the OWNER may elect. The OWNER shall release any machinery, equipment, tools, materials, or supplies, which remain on the work, and belong to persons other than the CONTRACTOR or his Surety, to their proper owners. The books on all operations provided herein shall be open to the CONTRACTOR and his Surety.

7.02 ... ABANDONMENT BY OWNER. In case the OWNER shall fail to comply with the terms of this contract, and should fail or refuse to comply with said terms within ten (10) days after written notification by the CONTRACTOR, then the CONTRACTOR may suspend or wholly abandon the work, and may remove therefrom all machinery, tools and equipment, and all materials on the site of work that have not been included in payments to the CONTRACTOR and have not been wrought into the work. And thereupon the ENGINEER shall make an estimate of the total amount earned by the CONTRACTOR, which estimate shall include the value of all work actually completed by said CONTRACTOR (at the prices stated in the attached proposal where unit prices are used), the value of all partially completed work at a fair and equitable price, and the amount of all Extra Work performed at the prices agreed upon, or provided for by the terms of this contract, and a reasonable sum to cover the cost of any provisions made by the CONTRACTOR to carry the whole work to completion and which cannot be utilized. The ENGINEER shall then make a final statement of the balance due the CONTRACTOR by deducting from the above estimate all previous payments by the OWNER and all other sums that may be retained by the OWNER under the terms of this Agreement and shall certify same to the OWNER who shall pay to the CONTRACTOR on or before thirty (30) days after the date of the notification by the CONTRACTOR the balance shown by said final statement as due the CONTRACTOR, under the terms of this Agreement.

END OF SECTION

SPECIAL CONDITIONS

CITY OF JONESTOWN, TEXAS

2024 Street Maintenance Project

SPECIAL CONDITIONS

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CITY OF JONESTOWN, TEXAS

2024 Street Maintenance Project

SPECIAL CONDITIONS

SC.01 GENERAL

The provisions of this section of the specifications shall govern in the event of any conflict between them and the "General Conditions of Agreement."

SC.02 DEFINITIONS

Agreement. "Agreement" shall mean the contract document as herein set forth.

Calendar Day. "Calendar Day" shall mean any day of the week or month, no days being excepted.

Extra Work. "Extra Work" shall mean and include all work that may be required by the Owner to be done by the Contractor to accomplish any change, alteration, or addition to the work shown on the plans or reasonably implied by the specifications, and not covered by the Contractor's proposal.

Parties. The parties to this agreement are the Owner and the Contractor.

Project. "Project" shall mean the work embraced by this agreement, including the Plans and Specifications, General and Special Conditions, Performance and Payment Bonds attached hereto; generally described as follows:

2024 Street Maintenance Project

Subcontractor. "Subcontractor" shall mean only those having a direct contract with the Contractor for performance of work on the project contemplated by these contract documents.

Substantially Completed. "Substantially Completed" shall mean that the project contemplated by the contract documents has been made suitable for use or occupancy, or the facility is in a condition to serve its intended purpose; but still may require minor miscellaneous work and adjustment, provided, however, that final payment of the contract price including retainage, shall not be made until completion of all punch list items and upon acceptance by the Owner. Acceptance by the Owner shall not impair any warranty obligation of the Contractor.

Work. "Work" or "Scope of Work" shall mean **2024 Street Maintenance Project** as more fully described in the Scope of Work contained in SC.06.

SC.03 ENGINEER TERMS

The word "Engineer" in these specifications shall be understood as referring to Kasberg, Patrick & Associates, LP, Consulting Engineers, 800 South Austin Avenue, Georgetown, TX 78626, Engineer of the Owner.

The words "Project Engineer" or "Project Manager" in these specifications shall be understood as referring to Steve Jones, City of Jonestown City Administrator or a designated representative at the City of Jonestown.

SC.04 LOCATION OF PROJECT

This project is located in various sectors of the City of Jonestown per the project maps located in the construction drawings.

SC.05 EXAMINATION OF SITE OF PROJECT

Prospective bidders shall make a careful and thorough examination of the site of the project, including all soil and water conditions to be encountered, improvements to be protected, disposal sites for surplus materials, arrangements necessary for providing ingress and egress to private properties and methods of handling traffic during prosecution of all the work involved.

SC.06 SCOPE OF WORK

The work to be performed under this contract consists of furnishing all materials, labor, supervision, tools, equipment and incidentals required, and performing all work necessary for the construction of:

1. Point Repair of Existing Streets.
2. 2" HMAC Overlay of Existing Streets.
3. Machine Milling of Existing Streets.

SC.07 FORMS, PLANS AND SPECIFICATIONS

Forms of Proposal, Contract and Bonds, and Plans and Specifications may be purchased from the offices of Kasberg, Patrick & Associates, LP. The cost for the plans and specifications shall be \$100.00 per set and is non-refundable.

SC.08 COPIES OF PLANS AND SPECIFICATIONS FURNISHED

Five (5) sets of 11"x17" plans and specifications shall be furnished to the successful Contractor, at no charge, for construction purposes. Additional copies may be obtained at the cost of reproduction upon request.

SC.09

PRE-BID CONFERENCE

Prior to receiving bids on this project, the Owner will conduct a prebid conference with all prospective bidders and other interested parties. The prebid conference will be held virtually via Microsoft Teams at the information provided below at 10:00 A.M. on Tuesday, April 16, 2024.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 253 069 885 370

Passcode: VMNVnd

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 806-368-4374,,414708488#](#) United States, Lubbock

Phone Conference ID: 414 708 488#

SC.10

ADDENDA

Bidders desiring further information, or interpretation of the plans and specifications must make request for such information to the Engineer as outlined in this Section and in the Instructions to Bidders for Construction. Answers to all such requests will be given in writing to all Plan Holders (persons who have made deposit for received plans and specifications) in addendum form and all addenda will be bound with and made a part of the contract documents. No other explanation or interpretation will be considered official or binding.

Any addenda issued prior to seventy-two (72) hours before the opening of bids will be mailed to each Plan Holder. Any addenda issued after that time will be mailed and faxed. The proposals as submitted by the Contractor will be so constructed as to include any addenda if such are issued by the Engineer prior to twenty-four (24) hours before the opening of bids.

In order that all plan holders will have equal access to information on this project, all requests to the Engineer for information or interpretation of the plans and specifications must be received before 12:00P.M. (noon), on Friday, April 19, 2024. If there is a need to clarify any requests at that time, the Engineer will issue a written addendum. After 12:00P.M. (noon), on Friday, April 19, 2024 the Engineer and Owner will not attempt to further clarify any written or oral requests.

SC.11

PREPARATION OF PROPOSAL

The Bidder shall submit proposal on the forms furnished. All blank spaces in the form shall be correctly filled in and the bidder shall state the price, both in words and numerals, for which Bidder proposes to do the work contemplated or furnish the materials required. Such prices shall be written in ink, distinctly and legibly, or

typewritten. In cases of discrepancy between the price written in words and the price written in figures, the price written in words shall govern. If the proposal is submitted by an individual, Bidders name must be signed by Bidder or their duly authorized agent. If a proposal is submitted by a firm, association, or partnership, the name and address of each member must be given and the proposal signed by a member of the firm, association or partnership, or person duly authorized. If the proposal is submitted by a company or corporation, the company or corporate name and business address must be given, and the proposal signed by an official or duly authorized agent. Powers of attorney authorizing agents or others to sign proposal must be properly certified and must be in writing and submitted with the proposal. The proposal shall be executed in ink.

Each proposal shall be enclosed in a sealed envelope, addressed as specified in the Notice to Contractors, and endorsed on the outside of the envelope in the following manner:

- a. Bidder's name
- b. Proposal for "**2024 Street Maintenance Project**".

Bid proposal may be withdrawn and resubmitted at any time prior to the time set for opening of the bids, but no proposal may be withdrawn or altered after the opening of the bids.

SC.12 ALTERNATE BIDS

There are no alternate bids for this project.

SC.13 QUALIFICATION OF LOW BIDDER

Prior to award of contract, the bidder shall submit such evidence as the Owner may require to establish the bidder's qualifications to satisfactorily perform the work included in this project. Information that may be required shall include (1) the bidder's current financial statement including amount of funds readily available to commence and carry out the work, (2) a list of equipment available for this project, (3) a list of projects that of the same general type as included in this contract, together with the names, addresses and phone numbers of persons familiar with this work, and (4) other information that may be pertinent to the bidder's qualifications.

Should the bidder fail to promptly produce evidence satisfactory to the Owner on any of the foregoing points, bidder may be disqualified and the work awarded to the next bidder so qualifying.

SC.14 AWARD OF CONTRACT

It is the intention of the Owner to award a contract on the basis of the lowest acceptable bid submitted by a qualified bidder as determined by the Owner. The right is reserved, as the interest of the Owner may require, to reject any and all bids and to waive any informality in bids received.

The City of Jonestown will notify the successful bidder, in writing, within sixty (60) days of the date of receiving bids, of its acceptance of Bidders proposal. The Contractor shall complete the execution of the required Bond and Contract within ten (10) days of such notice.

SC.15 SEQUENCE OF CONSTRUCTION

The time allotted for completion of this project is described under Section SC.16 of these Special Conditions.

Prior to beginning construction on this project, the Contractor shall prepare a written construction sequence and schedule for review by the Engineer and approval by the Owner. This construction sequence and schedule shall be followed by the Contractor unless changes are approved by the Owner.

No partial payment estimates will be issued until the Sequence and Schedule of Construction has been approved.

SC.16 TIME ALLOTTED FOR COMPLETION AND NOTICE TO PROCEED

The construction of the **2024 Street Maintenance Project** shall be completed within 90 calendar days.

SC.17 PRECONSTRUCTION CONFERENCE

After award of bid and prior to beginning construction, a conference will be held with representatives of the Contractor, Owner, Engineer, and the affected Utility Companies to discuss schedules and utility conflicts in the project. The purpose is to establish lines of communication between the parties involved. The time and place for the Preconstruction Conference shall be determined at the time of Bid Award.

SC.18 CONSTRUCTION IN PUBLIC ROADS AND PRIVATE DRIVES

No public or private road shall be entirely closed overnight. It shall be the responsibility of the Contractor to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade, and mark all bypasses and detours that might be required on and across the roads involved in the work included in this contract.

The Contractor shall be responsible for repair and maintenance of all roadways damaged as a result of the construction of this project for a period of one year after completion or acceptance of the work. Within this period of one year time, if it becomes necessary for the Owner to make such repairs, the Contractor shall reimburse the Owner for the cost of such repairs.

SC.19 REFERENCE SPECIFICATIONS

Where reference is made in these specifications to specifications compiled by others, such reference is made for expediency and standardization from the material supplier's point of view, and such specifications referred to are hereby made a part of these specifications.

SC.20 EXTENSION OF TIME

Contractor agrees that the proposal has been submitted in full recognition of the time required for the completion of this project, taking into consideration the average climatic range and material manufacturing conditions prevailing in this locality, and has considered the liquidated damage provision herein, and that Contractor shall not be entitled to, nor request, an extension of time on this contract, except when work has been delayed by an act or neglect of the Owner, employees or representatives of the Owner, or other contractors employed by the Owner, or by changes ordered in the work, or reductions thereto in writing. The Contractor may apply in writing for an extension of time, submitting therewith all written justification as may be required by the Engineer for such and extension as requested by Contractor. The Engineer, within ten (10) days after receipt of a written request for an extension of time by the Contractor, which is supported by all requested documentation, shall decide if an extension of time shall be allowed.

SC.21 LIQUIDATED DAMAGES FOR DELAY BY CONTRACTOR

The Contractor agrees that time is of the essence on this contract and that the Owner will be damaged as a result of any delay beyond the date agreed upon in the completion of all items of work herein specified and contracted for. The parties understand and agree that the actual damages will be sustained by the Owner because of such delay will be uncertain and difficult of ascertainment and it is further agreed that a reasonable estimate of the actual amount of such damages in light of the facts known to the parties at the time of execution of this contract will be five hundred dollars (\$100.00) per day. It is therefore agreed that the Owner may withhold permanently from the Contractor's total compensation, the total sum of \$100.00 per day as liquidated damages for delay for each day of delaying completion beyond the date agreed upon for completion of the items of work herein specified and contracted for (after due allowance for such extension of time as is provided for in the General Conditions of Agreement and in Paragraph SC.20).

SC.22 DAMAGES

Article 3.08 of the General Conditions of Agreement is hereby voided and replaced with the following:

In the event the Contractor is damaged in the course of the completion of the work by the neglect, or default of the Owner, or representative of the Owner, or of any other Contractor employed by the Owner upon the work, thereby causing loss to the Contractor, the Owner agrees to reimburse the Contractor for such loss. In the event the Owner is damaged in the course of the work by the act, negligence, omission, mistake or default of the Contractor, or should the Contractor unreasonably delay the progress of the work being done by others on the job so as to cause loss for which the Owner becomes liable, then the Contractor shall reimburse the Owner for such loss.

SC.23 OBJECTIONS AND TIME OF FILING CLAIMS

In Paragraph 6.04 of the General Conditions, add the following after the first sentence:

“Failure to file such an objection during such period shall constitute waiver thereof and consent to the decision rendered by the Engineer.”

Also, delete the third sentence, which deals with arbitration.

Also, in Paragraph 2.05 of the General Conditions, delete the last clause dealing with arbitration and insert:

“Failure to file such an objection during such period shall constitute waiver thereof and consent to the decision rendered by the Engineer.”

SC.24 MEDIATION

Article 6.05 of the General Conditions of Agreement is hereby voided and replaced with the following:

In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, the Owner and the Contractor agree that all disputes between them arising out of or relating to this Agreement or the Project shall be submitted to nonbinding mediation unless the parties mutually agree otherwise.

The Owner and Contractor further agree to include a similar mediation provision in all agreements with their subcontractors, subconsultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between the parties to all those agreements.

SC.25 FEES AND ROYALTIES

All fees or royalties for any patented invention, process, article, or arrangement in any manner connected with the work, or with these specifications, shall be included in the price stated in the proposal.

SC.26 INDEMNITY

Contractor agrees to and shall indemnify and hold harmless Owner, its officers, agents and employees, from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorney’s fees, for injury to or death of any person, or for damage to any property, arising out of or in connection with the work done by Contractor under this contract, regardless of whether such injuries, death or damages are caused in whole or in part by the negligence of the City of Jonestown.

Contractor assumes full responsibility for the work to be performed hereunder, and hereby releases, relinquishes and discharges Owner, its officers, agents and employees, from all claims, demands, and causes of action of every kind and character including the cost of defense thereof, for any injury to, including death of, person (whether they be third persons, contractor, or employees of either the parties hereto) and any loss of or damage to property (whether the same be that of either of the parties hereto or of third parties) caused by or alleged to be caused by, arising out of, or in connection with Contractor’s work to be performed hereunder whether or not said claims, demands and

causes of action in whole or in part are covered by insurance regardless of whether such loss, damage, or injury was caused by Owner. Owner, by this agreement, does not give consent to litigation.

SC.27 LAWS TO BE OBSERVED

The Contractor shall, at Contractors own expense, do those things necessary for the procurement of and shall procure all permits, certificates and licenses required by the law or governmental regulation for the performance of work. Contractor shall comply with all federal, state and local laws, ordinances or rules and regulations relating to the performance of work. In addition to all other laws, ordinances and rules and regulations, these shall include any such laws, ordinances or rules and regulations relating to noise from the Contractor's operations.

SC.28 STATE AND CITY SALES TAXES

This contract is issued by an organization which qualifies for exemption provisions pursuant to Provisions of the Texas Tax Code. Sections 151.301, 151.307, 151.309 and 151.311. The Contractor must obtain a limited sales excise and use tax permit or exemption certificate which shall enable Contractor to buy the materials to be incorporated into the work without paying the tax at the time of purchase.

SC.29 ANTITRUST

The Contractor hereby assigns to the Owner any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States, 15 U.S.C.A. Section 1, et seq, (1973).

SC.30 GUARANTY AGAINST DEFECTIVE WORK

The Contract shall indemnify the Owner against any repairs which may become necessary to any part of the work performed under each contract, arising from defective workmanship or material used therein, for a period of one (1) year from the date of final acceptance of the work, unless the technical specifications provide for another period.

Neither the Certificate of Acceptance nor any provision in the Contract Documents, nor partial or entire use, or occupancy of the premise by the Owner will constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials.

SC.31 INSURANCE

Satisfactory certificates of insurance for all coverage listed herein shall be filed with the Owner prior to starting any construction work on this contract. Insurance shall include the Owner, the Engineer and the State of Texas as additional insured parties.

Workmen's Compensation and Employer's Liability

This insurance shall protect Contractor against all claims under applicable state workmen's compensation laws. Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workmen's compensation law. This policy shall include an "all states" endorsement.

The liability limits shall not be less than:

Workmen's Compensation	Statutory
Employer's Liability	\$100,000 each occurrence

Comprehensive Automobile Liability

This insurance shall be written in comprehensive form and shall protect Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off site of all motor vehicles licensed for highway use, whether they are owned, non-owned, or hired.

The liability limits shall not be less than:

Bodily Injury	\$250,000 each person \$500,000 each occurrence \$1,000,000 aggregate
Property Damage	\$100,000 each occurrence \$100,000 aggregate

Comprehensive General Liability

This insurance shall be written in comprehensive form and shall protect Contractor and additional insured parties against all claims arising out of any act or omission of the Contractor or Contractors agents, employees or subcontractors.

The liability limits shall be not less than:

Bodily Injury	\$500,000 each person \$500,000 each occurrence \$500,000 aggregate
Property Damage	\$100,000 each occurrence \$100,000 aggregate

Excess Liability Insurance

The Contractor shall obtain, pay for and maintain a policy during the contract term, insuring Contractor for an amount of not less than \$1,000,000 combined single limit bodily injury and property damage liability insurance, including death, in excess of the primary coverage required hereinabove. The Owner, the Engineer and the State of Texas shall be named as additional insureds.

The Contractor shall furnish a Certificate of Insurance for the above coverage with a provision that the Owner will be notified by the insurance company ten (10) days prior to cancellation of the policy during the term of the contract, and if canceled, a new policy must be furnished prior to cancellation.

SC.32

PAYMENTS TO CONTRACTOR

Progress Payments

Article 5.04 of the General Conditions of Agreement, is hereby voided and replaced by the following:

The Contractor shall prepare a requisition for progress payment as of the last day of the month and submit it, with six (6) copies, to the Engineer. On or before the 10th day of each month, the Engineer shall prepare a statement showing as completely as practicable the total value of the work done by the Contractor up to and including the last day of the preceding month; said statement shall also include the invoice value of all sound materials delivered, and properly stored and protected, on the site of the work that are to be fabricated into the work.

The Owner shall then pay the Contractor on or before the 25th day of the current month the total amount of the approved statement. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) of the total amount, as a retainage and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit process contained in the agreement and adjusted by approved change orders. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be furnished to the Engineer.

The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Owner. Such payment shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Owner in all details.

The five percent (5%) retainage of the progress payments otherwise due to the Contractor may not be reduced until the building of the project is substantially complete and a reduction in the retainage has been authorized by the Owner.

Withholding Payments

The Owner may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Owner and if so elects may also withhold amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or

disputes between the Contractor and Contractors subcontractors or material dealers, or to withhold any moneys for their protection unless the Owner elects to do so. The failure or refusal of the Owner to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

Separate Payment

Except as modified by Change Orders subsequent to execution of the Contract for this proposed work, no separate payment shall be made for work described in these Specifications or shown on the Plans. Total compensation to the Contractor shall be as set forth in the various Bid Items in the Proposal and Bid Schedule.

The Owner, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Owner deems the same necessary in order to protect the Owner's interests. The Owner, however, may if it deems such action advisable make payment in part or in full to such Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impart the obligations of any surety or sureties furnished under this Contract.

Withholding of any amount due the Owner, under general and/or special conditions regarding "Liquidated Damages," shall be deducted from the final payment due the Contractor.

All sentences of Article 5.07 of the General Conditions shall remain and govern the contract as stipulated.

SC.33

WAGE RATES

All employees of the Contractor on the work to be performed under this contract shall be paid the prevailing wage scale in this locality for work of similar character, and in no event less than the rates shown in the schedule of minimum wage rates furnished in these Special Conditions.

SC.34

EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

- (a) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, that employees are treated during employment without regard to their race, color, sex, religion, age or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees or applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (b) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, national origin or age.
- (c) The Contractor shall send to each labor union or representative of workers with which Contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor shall include the provisions of this section in all subcontracts pertaining to the work.

SC.35 SUPERINTENDENCE BY CONTRACTOR

The Contractor shall have on the project at all times, as Contractors agent, a competent Superintendent capable of reading and of thoroughly understanding the plans and specifications and thoroughly experienced in the type of work being performed. The Superintendent shall have full authority to execute orders or directions and to promptly supply such materials, equipment, tools, labor and incidentals as may be required. Such superintendence shall be furnished regardless of the amount of the work subcontracted.

SC.36 INSPECTION

The word "Inspection" or other forms of the word, as used in the contract documents for this project shall be understood as meaning the Project Engineer will observe and check the construction in sufficient detail to satisfy that the work is proceeding in general accordance with the contract documents, but will not be a guarantor of the Contractor's performance.

SC.37 SHOP DRAWINGS

Contractor shall submit shop drawings in accordance with the following:

All shop drawings submitted by subcontractors for review by the Owner shall be sent directly to the Contractor for checking. The Contractor shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.

The Contractor shall check all subcontractor's shop drawings regarding measurements, size of members, materials, and details to satisfy himself that they conform to the intent of the Drawings and Specifications. Shop drawings found to be inaccurate or otherwise in error shall be returned to the subcontractors for correction before submission thereof.

All details on shop drawings submitted for review shall show clearly the relation of the various parts to the main members and lines of the structure, and where correct fabrication of the work depends upon field measurements, such measurements shall be made and noted on the drawings before being submitted for review.

The review of shop drawings, samples or product data by the Engineer shall not relieve the Contractor from his/her responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Engineer will have no responsibility therefore.

No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the review of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to reviewed shop drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work sections, of the Specifications, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

Three (3) copies of each shop drawing shall be submitted for review. Each shop drawing shall be legible and shall be on sheets no larger than 11" x 17". The three (3) copies requirement is applicable to the Traffic Control Plan and any other submittal deemed necessary prior to the start of construction.

SC.38

TRADE NAMES AND MATERIALS

Where materials or equipment are specified by a trade or brand name, it is not the intention of the Owner to discriminate against any equal product of another manufacturer, but rather to set a definite standard of quality or performance, and to establish an equal basis for the evaluation of bids. Where the words "equivalent," "proper," or "equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent of, or equal to some other thing. Unless otherwise specified all materials shall be of the best of their respective kinds, shall be in all cases fully equal to approved samples and shall never have been used for any temporary purpose whatsoever. Notwithstanding that the words "or equal to" or other such expressions may be used in the specifications in connection with a material, manufactured article or process specifically designated shall be used, unless a substitute shall be approved in writing before installation.

SC.39

TESTING OF MATERIALS

Testing and control of construction materials and methods used in the work shall be done by an approved local commercial laboratory employed and paid directly by the Owner, or other approved personnel employed by the Owner. Where a commercial laboratory is used, all representative testing caused by test failure will be accomplished at the Contractor's expense.

SC.40 COORDINATION WITH OTHERS

In the event other contractors are doing work in the same area simultaneously with this project, the Contractor shall coordinate proposed construction with that of other contractors.

SC.41 EXISTING UTILITIES AND SERVICE LINES

The Contractor shall be responsible for the protection of all existing utilities or service lines crossed or exposed by construction operations. Where existing utilities or service lines are cut, broken, or damaged, the Contractor shall replace or pay for replacement of the utilities or service lines with the same type of original construction, or better, at Contractors own cost and expense. All exposed manholes, gate valve, boxes or any other utility exposed shall be covered and protected during the construction process.

SC.42 EXISTING STRUCTURES

The plans show the location of all known surface and subsurface structures. However, the Owner assumes no responsibility for failure to show any or all of these structures on the plans, or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or require the building of special work, provisions for which are not made in these plans and proposal, in which case the provisions in these specifications for extra work shall apply.

SC.43 CONNECTIONS TO EXISTING FACILITIES

(NOT USED)

SC.44 PROPERTY LINES AND MONUMENTS

The Contractor shall protect all property corner markers, and when any such markers or monuments are in danger of being disturbed they shall be properly referenced and if disturbed shall be reset at the expense of the Contractor.

SC.45 USE OF EXPLOSIVES

Use of explosives will not be allowed.

SC.46 LINES AND GRADES

All work under this Contract shall be constructed at locations designated and marked by the Project Engineer. The full responsibility for holding to alignment and grade shall rest upon the Contractor.

The Contractor shall stockpile excavation and other materials as to cause no inconvenience in the use of the lines and grades given. Contractor shall remove any obstruction created contrary to this provision.

The Contractor shall safeguard all control points and bench marks established on the site by the Project Engineer, shall bear the cost of reestablishing same, if disturbed, and shall assume the entire expense of rectifying work improperly constructed due to failure to maintain and protect such established control points and bench marks.

SC.47 ACCESS TO PROJECT SITE AND RIGHT-OF-WAY

The Contractor shall provide at its expense all improvements and make suitable provisions for ingress and egress. The Contractor also shall provide at its expense necessary all weather access roads to the project location as required for transporting equipment and materials.

If additional area is needed by the Contractor, it shall be the responsibility of the Contractor to make all necessary arrangements and pay all costs associated with the acquisition and utilization of such area.

Specific right-of-way easement arrangements between the Owner and property owners include restrictions that may affect the Contractor's construction operations. These restrictions are summarized on a sheet included in the plans.

SC.48 BARRICADES, LIGHTS AND WATCHMEN

The Contractor shall, at Contractors own cost and expense, furnish and erect such barricades, fences, lights and danger signals, shall provide such watchmen, and shall provide such other precautionary measures for the protection of persons or property and of work as are necessary. There shall be no open trenches not properly barricaded at the end of each workday. Barricades shall be painted in a color that will be visible at night. From sunset to sunrise, the Contractor shall furnish and maintain sufficient lights at each barricade and sufficient numbers of barricades shall be erected to keep vehicles from being driven on or into any work under construction. The Contractor shall furnish watchmen in sufficient numbers to protect the work.

The Contractor will be held responsible for all damage due to failure of barricades, signs, lights and watchmen. The Contractor's responsibility for the maintenance of barricades, signs and lights, and for providing watchmen shall not cease until the project has been accepted by the Owner.

SC.49 PROTECTION OF TREES AND LANDSCAPING

No trees or landscaping shall be removed or cut without the Owner's approval except those that provide direct interference with the installation of the utility line within the permanent and temporary easements. The Contractor shall use proper caution to minimize removal of trees within the temporary easement. Trees adjacent to the permanent and temporary easements, but not interfering with the work, shall be protected from damage by the construction operations.

SC.50 LIGHTS AND POWER

The Contractor shall provide, at Contractors own expense, temporary lighting and power facilities required for the proper prosecution of the work.

SC.51 WATER FOR CONSTRUCTION AND TESTING

(NOT USED)

SC.52 TRENCH SAFETY SYSTEM

(NOT USED)

SC.53 TOOLS AND ACCESSORIES

The Contractor shall, unless otherwise stated in the specifications, furnish with each type, kind or size of equipment, one (1) complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain, or repair the equipment. Ordinary mechanic's tools are not considered special tools. Such special tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

Each piece of equipment shall be provided with a substantial name plate, securely fastened in place and clearly inscribed with the manufacturer's name, year or manufacture, and principal rating data.

SC.54 PROJECT MAINTENANCE

The Contractor shall maintain, and keep in good repair, the improvements covered by these plans and specifications during life of this contract.

SC.55 FENCES, IMPROVEMENTS AND DRAINAGE CHANNELS

Fencing and gates removed to permit construction shall be replaced in the same location and left in a condition as good as, or better, than that in which they were found. Fences to be removed and not replaced are noted on the plans.

Where surface drainage channels, storm sewers, or drainage structures are disturbed or altered during construction, they shall be restored to their original condition as soon as possible.

SC.56 DISPOSAL OF WASTE AND SURPLUS EXCAVATION

All trees, stumps, slashings, brush or other debris removed from the site as a preliminary to the construction shall be chipped or removed from the property. No burning will be allowed. No trash, debris or refuse from construction shall exist on the ground.

All excavated earth in excess of that required for backfilling shall be disposed of in a satisfactory manner in locations approved by the Owner.

SC.57 CLEANUP

The Contractor shall at all times keep the job site as free from all material, debris and rubbish as is practical and shall remove same from any portion of the job site as construction of that portion is completed.

Upon completion of the work, the Contractor shall remove from the site all plant, materials, tools and equipment belonging to Contractor and leave the site with an acceptable appearance. The Contractor shall thoroughly clean all equipment and materials installed and shall deliver over such materials and equipment in a bright, clean, polished and new-appearing condition.

SC.58 ARCHEOLOGICAL DISCOVERIES

No activity which may affect a State Archeological Landmark is authorized until the Owner has complied with the provisions of the Antiquities Code of Texas. The Owner has previously coordinated with the appropriate agencies and impacts to known cultural or archeological deposits have been avoided or mitigated. However, the Contractor may encounter unanticipated cultural or archeological deposits during construction.

If archeological sites or historic structures are discovered after construction operations are begun, the Contractor shall immediately cease operations in that particular area and notify the Owner, and the Texas Historical Commission, (512-463-6096). The Contractor shall take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner. The Owner will promptly coordinate with the Texas Historical Commission and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The Contractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

Compensation to the Contractor, if any, for lost time or changes in construction resulting from the find, shall be determined in accordance with changed or extra work provisions of the Contract Documents.

SC.59 SERVICE OF MANUFACTURER'S REPRESENTATIVE

The contract price for the project shall include the cost of furnishing competent and experienced representatives from the manufacturers involved. Such representatives shall assist the Contractor, when required, to install, adjust, and test the equipment in conformity with the contract documents. After the equipment is placed in permanent operation by the City of Jonestown, such representatives shall make all adjustments and tests as specified or required to comply with the contract documents, and shall instruct the Owner in the operation and maintenance of the equipment.

SC.60 FINAL FIELD TESTS

Upon completion of the work and prior to final payment, all items installed under this contract shall be subject to acceptance tests as specified or required to provide compliance with the contract documents by the City of Jonestown.

SC.61 AS-BUILT DIMENSIONS AND DRAWINGS

(NOT USED)

SC.62 TEXAS DEPARTMENT OF TRANSPORTATION PERMITS

(NOT USED).

Prevailing Wage Schedule

1. Payment

(A) Employee Certification

CONTRACTOR, Subcontractor, and Sub-subcontractor shall identify in writing, the classification agreed to by all laborers, workmen and mechanics employed by them in the execution of the Contract, and pay not less than rates specified in the attached Wage Rate Schedule(s). If work performed by worker is different than the classification agreed upon, the worker shall be paid the minimum wage for work performed.

(B) Classification Definitions

1. Building

Definitions for building classifications are stated in "Dictionary of Occupational Titles," Department of Labor, 4th Edition, 1977.

2. Highway-Heavy

Definitions for Highway-Heavy classifications shall conform to "Standard Job Classification and Descriptions," AGC of Texas Highway, Heavy, Utilities and Industrial Branch.

3. Federal Building and Highway Heavy

Definitions are stated in "Directory of Occupational Titles," Department of Labor, 4th Edition, 1977.

(C) Minimum Wages

Workers on Project shall be paid not less than wage rates described in this section. Such wage rates shall be used throughout the Contract. If a classification is to be used which is not listed in this section, CONTRACTOR shall request such rates from the Department of Labor and forward a copy of the request and response to OWNER.

Inclusion of wage rates does not relieve CONTRACTOR from responsibility to comply with applicable State or Federal wage laws.

All mechanic and laborers working upon the Work shall be paid unconditionally and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by Secretary of Labor under the Copeland Act, Title 29, CFR, Part 3) full wages accrues and when due, computed at rates not less than wage rates bound herein pertaining to type of Work being performed. When Work is of such a nature that both Building and Highway-Heavy wage scales are incorporated into contract, CONTRACTOR shall pay wage rates to mechanics or laborers performing Work in more than one classification at the rate indicated for each classification for time actually worked as determined by area practice applicable to type (Site Construction Crafts or Building Construction Crafts) of Work being performed without regards to skill. Salaried specialists (project superintendent and administrative personnel only) in the permanent employment of CONTRACTOR do not fall under and wage classification. Wage rates shall be posted by CONTRACTOR at site of Work in a prominent place where they can be easily seen by workers. In the event there are multiple job sites (such as in street or utility construction), wage rates shall be posted at CONTRACTOR's office and be posted at other places where they would be most likely seen by workers.

(D) Overtime Requirements

No Contractor, Subcontractor, or Sub-subcontractor contracting for any part of contract Work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which the laborer or mechanic is employed on such Work, to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times laborers or mechanics basic rate of pay for all hours in excess of forty hours in such workweek.

2. Apprentices and Trainees

(A) Locally Funded Projects

Apprentices and helpers will be permitted to work as such when they are listed on a payroll as an apprentice or helper. Apprentices or helpers are to be paid a minimum of 50 percent of journeymen wages indicated. The allowable ratio of apprentices or helpers in any craft is not to exceed 2:1.

Employees who are not under the apprentice or helper program shall be paid the wage rate provided in contract for Work the Employee actually performed.

3. Withholding of Payments

OWNER may withhold or cause to be withheld from CONTRACTOR as much of the accrued payments which may be determined necessary to pay laborers and mechanics employed by CONTRACTOR, Subcontractors, or Sub-subcontractors on the Work the full amount of wages required by this Contract. In the event of nonpayment of wages to laborers or mechanics working on the site of the Work of this contract, OWNER may, after written notice to CONTRACTOR, take such action as may be necessary to cause suspension of any further payments or advance of funds to CONTRACTOR until such violations have ceased and until restitution has been made.

4. Payroll and Reports

Payrolls relating to this Work shall be maintained during term of Contract and preserved for a period of three (3) years thereafter by CONTRACTOR for all laborers and mechanics working on the Work. Such records shall contain name and address of each such employee, his/her correct classification, rates of pay, including fringe benefit rates when applicable, daily and weekly number of hours worked, deductions made and actual wages paid.

CONTRACTOR shall make payroll records available for inspection by authorized representatives of OWNER upon written request, and shall permit such representatives to observe and/or interview employees during working hours on Work site, for such time as is required to obtain personal verification of selected payroll data. If it is apparent that there is a wage rate violation or improper classification of employees, an investigation will be conducted, and action taken as appropriate.

5. Complaints and Penalty's

CONTRACTOR's attention is directed to House Bill TX 73 RHB 560 amending Art. 5159a, V.T.C.S. relating to the payment of certain laborers, workers, and mechanics under public works contracts.

6. Area Practice

Highway Heavy Construction Wage Rates shall be used on this Work unless Building Construction Rates are included as follows:

Building Construction Wage Rates shall be used when the following conditions are met:

Building construction generally is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving. Additionally, such structures need not be “habitable” to be Building Construction. The installation of heavy machinery and/or equipment does not generally change the project’s character as a building.

Building Construction Wage Rates determination shall include all construction necessary to complete a facility regardless of the number of contracts involved so long as all contract awarded are closely related in purpose, time and place. Demolition or site work preparatory to Building Construction is considered a part of the building Work for wage rate determination purposes.

Incidental Building Construction shall include Highway Heavy Construction Items when the Project cost for the incidental items are less than 20 percent, except when the Building Construction is less than 4 percent of the Project cost the Highway Heavy Construction Rates will apply.

Multiple Classification

A multiple classification shall be used if Highway Heavy Construction items are more than 20 percent of the Project Cost.

WAGE RATES FOR THIS PROJECT ARE ATTACHED

Bidding Requirements, Contract Forms Conditions of the Contract
WAGE RATES AND PAYROLL REPORTING
Section 00830BC

PREVAILING WAGE RATE DETERMINATION

BUILDING CONSTRUCTION TYPE

COUNTY NAME : TRAVIS

Wages based on DOL General Decision: TX160323 1/15/2016 TX323

CLASSIFICATION	RATE	FRINGES	TOTAL WAGE
Asbestos Worker/Heat & Frost Insulator (Duct, Pipe, and Mechanical System Insulation)	\$ 21.17	\$ 8.77	\$ 29.94
Boilermaker	\$ 23.14	\$ 21.55	\$ 44.69
Bricklayer	\$ 20.07	\$ -	\$ 20.07
Carpenter	\$ 20.75	\$ 7.30	\$ 28.05
Carpenter (Acoustical Ceiling Installation only)	\$ 14.00	\$ -	\$ 14.00
Carpenter (Form Work Only)	\$ 15.62	\$ 0.05	\$ 15.67
Cement Mason/Concrete Finisher	\$ 15.71	\$ -	\$ 15.71
Drywall Finisher/Taper	\$ 17.06	\$ 4.43	\$ 21.49
Drywall Hanger and Metal Stud Installer	\$ 17.47	\$ 3.45	\$ 20.92
Electrical Installer (Sound and Communication Systems, Excluding Wiring)	\$ 18.00	\$ 2.30	\$ 20.30
Electrician (Excludes Installation of Sound and Communication Systems)	\$ 27.15	\$ 7.88	\$ 35.03
Elevator Mechanic <5 years experience	\$ 37.76	\$ 32.25	\$ 70.01
Elevator Mechanic >5 years experience	\$ 37.76	\$ 33.01	\$ 70.77
Floor Layer (Carpet)	\$ 21.88	\$ -	\$ 21.88
Glazier	\$ 12.83	\$ -	\$ 12.83
HVAC Mechanic (HVAC Unit Installation Only)	\$ 23.78	\$ 6.89	\$ 30.67
Ironworker, Ornamental	\$ 23.02	\$ 6.35	\$ 29.37
Ironworker, Reinforcing	\$ 12.27	\$ -	\$ 12.27
Ironworker, Structural	\$ 20.73	\$ 5.24	\$ 25.97
*Lead Paint or Asbestos Abatement Worker	\$ 12.27	\$ -	\$ 12.27
Laborer, Common or General	\$ 11.44	\$ -	\$ 11.44
Laborer, Mason Tender - Brick	\$ 12.22	\$ -	\$ 12.22
Laborer, Mason Tender - Cement/Concrete	\$ 11.85	\$ -	\$ 11.85
Laborer, Pipelayer	\$ 12.45	\$ -	\$ 12.45
Laborer, Roof Tearoff	\$ 11.28	\$ -	\$ 11.28
Operator, Backhoe/Excavator/Trackhoe	\$ 19.43	\$ 3.49	\$ 22.92
Operator, Bobcat/Skid Steer/Skid Loader	\$ 13.00	\$ -	\$ 13.00
Operator, Bulldozer	\$ 14.00	\$ -	\$ 14.00
Operator, Crane	\$ 34.85	\$ 9.85	\$ 44.70
Operator, Drill	\$ 14.50	\$ -	\$ 14.50
Operator, Forklift	\$ 16.64	\$ 6.26	\$ 22.90
Operator, Grader/Blade	\$ 19.30	\$ -	\$ 19.30
Operator, Loader	\$ 14.00	\$ -	\$ 14.00

Operator, Mechanic	\$ 18.75	\$ 5.12	\$ 23.87
Operator, Paver (Asphalt, Aggregate, and Concrete)	\$ 16.03	\$ -	\$ 16.03
Operator, Roller	\$ 11.25	\$ -	\$ 11.25
Painter (Brush, Roller, and Spray, Excludes Drywall Finishing/Taping)	\$ 18.76	\$ 6.35	\$ 25.11
Pipefitter (Including HVAC Pipe Installation)	\$ 28.00	\$ 11.41	\$ 39.41
Plumber, Excludes HVAC Pipe Installation	\$ 23.57	\$ 6.37	\$ 29.94
Roofer	\$ 12.00	\$ -	\$ 12.00
*Roofer, Metal	\$ 14.05	\$ -	\$ 14.05
Sheet Metal Worker (Including HVAC Duct Installation)	\$ 24.38	\$ 13.74	\$ 38.12
Sprinkler Fitter (Fire Sprinklers)	\$ 27.43	\$ 17.12	\$ 44.55
Tile Finisher	\$ 11.32	\$ -	\$ 11.32
Tile Setter	\$ 16.35	\$ -	\$ 16.35
Truck Driver, Dump Truck	\$ 12.39	\$ 1.18	\$ 13.57
Truck Driver, Flatbed Truck	\$ 19.65	\$ 8.57	\$ 28.22
Truck Driver, Semi-Trailer Truck	\$ 12.50	\$ -	\$ 12.50
Truck Driver, Water Truck	\$ 12.00	\$ 4.11	\$ 16.11
Waterproofers	\$ 16.30	\$ 0.06	\$ 16.36

<http://www.wdol.gov/wdol/scafiles/davisbacon/tx.html>

* See Page 2 for Additional Wage Information

Note: *Lead Paint & Asbestos Abatement and Roofer, Metal Classifications have been added to this Prevailing Wage Rate Determination pursuant to a City of Austin Prevailing Wage Survey (trades absent from DOL).

The Wage Compliance information detailed below was excerpted from General Decision TX070018 or other DOL sources.

1. Additional Trade information:

Electricians** - Including low voltage wiring for computers, fire/smoke alarms.

Elevator Mechanics*** - also must be paid for 7 holidays - New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

Welders - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added upon the advance approval of City of Austin Contract Administration. CONTRACTOR shall submit to City of Austin Contract Administration for review the classification, a bona fide definition of work to be performed and a proposed wage with sample payrolls conforming to area practice prior to the start of the job for that type of work.

2. Wages

The Total Wage may be met by any combination of cash wages and credible "bona fide" fringe benefits by the employer. For overtime, the basic hourly rate listed in the contract wage determination must be used in computing pay obligations.

3. Crediting fringe benefit contributions to meet DBA/DBRA and City of Austin requirements:

The Davis-Bacon Act (and 29 CFR 5.23), list fringe benefits to be considered. Examples are:

- > Life Insurance
- > Health Insurance
- > Pension
- > Vacation
- > Holidays
- > Sick Leave

Note: The use of a truck is not a fringe benefit; a Thanksgiving turkey or Christmas bonus is not a fringe benefit. No credit may be taken for any benefit required by federal, state, or local law such as: workers compensation, unemployment compensation; or social security contributions.

Contributions to fringe benefit plans must be made regularly, e.g. daily, weekly, etc. They must be more frequent than quarterly. (see 29 CFR 5.5 (a)(1)(I)) A periodic bonus may not be counted as a fringe benefit.

4. Annualization of Benefit Costs

If a firm provides an electrician with \$200 per month medical insurance, to calculate allowable fringe benefit credit contributions per hour, the formula ([\$200 x 12 months] divided by 2080 hours = \$1.15 per hour) should be used.

5. Proper Designation of Trade

A work classification on the wage decision for each worker must be made based on the actual type of work he/she performed and each worker must be paid no less than the wage rate on the wage decision for that classification **regardless** of his or her level of skill.

6. Split Classification

If a firm has employees that perform work in more than one classification, it can pay the wage rates specified for each classification ONLY if it maintains accurate time records showing the amount of time spent in each classification. If accurate time records are not maintained, these employees must be paid the highest wage rate of all the classifications of work performed by each worker. Accurate time records tracking how many hours a worker performed the work of one trade and then switched to another trade must be accounted for on a daily basis and reflected on Employer Certified Payroll accordingly.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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TECHNICAL SPECIFICATIONS

All Construction for this project shall comply with the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges unless accepted by these construction documents or the construction drawings.

TECHNICAL SPECIFICATIONS

SECTION G01 - CONSTRUCTION WITHIN RIGHT-OF-WAY OF HIGHWAYS,
COUNTY ROADWAYS, CITY STREETS AND RAILROADS

G01.01 DESCRIPTION OF WORK

This section of the specifications shall govern unless otherwise specified in applicable permits, the installation of pipelines along and across the rights-of-way of highways, roadways, and city streets.

G01.02 CONSTRUCTION IN TEXAS DEPARTMENT OF TRANSPORTATION RIGHTS-OF-WAY

- A. Pipelines to be placed across rights-of-way of the Texas Department of Transportation (TxDOT) shall be installed as shown on the plans and as specified herein.
- B. Encasement pipe shall be installed under the highway by boring in accordance with details shown on the plans. The pipe shall be installed with even bearing throughout its length, and all voids between the earth and encasement pipe shall be filled with grout. The pipe shall be tightly jointed to prevent leakage.
- C. The Contractor shall notify TxDOT of his construction schedule not less the 5 days prior to commencing work within the right-of-way. The Contractor shall conform to the requirements of TxDOT as to details of construction methods and time of construction. All construction equipment must be kept well off the highway pavement unless otherwise approved by TxDOT.
- D. Where encasement of carrier pipe is required to be installed under highways, streets, or other facilities by jacking of boring methods, construction shall be made in a manner that will not interfere with the operation of the highway, or other facility, and will not weaken or damage any embankment or structure. During construction operations, barricades and lights to safeguard traffic and pedestrians shall be furnished and maintained, as required, until such time as the backfill has been completed and then shall be removed from the site.
- E. The Contractor shall take the proper precautions to avoid excavating earth or rock or shattering rock beyond the limits of excavation needed to install the conduit. All damages by excavating and blasting either of surface or subsurface structures, shall be repaired or replaced by the Contractor at his own cost and expense.
- F. The removal of any obstruction that may be found to conflict with the placing of this pipe will not be measured for payment or paid for as separate contract pay item. The removal of any such obstruction will be included in such contract pay items as are provided in the proposal and contract.

G01.03

CONSTRUCTION IN RIGHTS-OF-WAY OF COUNTY ROADS AND CITY STREETS

- A. Pipelines may be placed along and across county roads, city streets and private driveways by the open cut method, unless designated otherwise on the plans. However, the Contractor shall at all times, keep a sufficient width of the roadway clear of dirt and other material to allow free flow on one lane of traffic. It shall be the responsibility of the Contractor to build and maintain all weather by-passes and detours, if necessary, and to furnish all flagmen and to properly light, barricade and mark all by-passes and detours that might be required on and across the roadways involved in this project. Barricades, construction signs and warning lights shall conform to TxDOT and Public Transportation Standards of Construction.
- B. The Contractor shall make every effort to complete construction and allow immediate access to adjacent property at all driveway entrances located along the roadways or streets. Owners or tenants of improvements where access and/or entrance drives are located shall be notified at least eight (8) hours prior to the time the construction will be started at their drive-ins or entrances and informed as to the length of time driveways will be closed, which period shall not exceed six (6) hours.
- C. The Contractor shall be responsible for all road and entrance reconstruction, and repairs and maintenance of same, for a period of one year from the date of such reconstruction. In the event the repairs and maintenance are not made immediately, and it becomes necessary for the City to make such repairs, the Contractor shall reimburse the City for the cost of such repairs.
- D. Backfill in trenches within the rights-of-way of county roads and city streets shall be placed in accordance with requirements of the agency having jurisdiction of such roads or streets, and according to the various applicable sections of these specifications which govern the installation of the pipelines. Before completion of the proposed work, all roadway shoulders, slopes, ditches and berms shall be restored to their original condition.

G01.04

MEASUREMENT AND PAYMENT

No separate payment will be made for items included in this section. All related costs shall be included in the proper item of the Proposal and Bid Schedule.

END OF SECTION

TECHNICAL SPECIFICATIONS

SECTION G02 – PREPARING RIGHT OF WAY

G02.01 DESCRIPTION OF WORK

- A. The work to be performed under this section of specifications shall consist of the preparation of the right of way for construction operations by the removal and disposal of all obstructions from the right of way and from designated easements, where removal of all such obstruction is not otherwise shown on the construction drawings and specifications.
- B. Such obstructions shall be considered to include remains of houses, foundations, floor slabs, concrete, brick, lumber, plaster, septic tank drain fields, basements, abandoned utility pipes or conduits, equipment, fences, retaining walls and buildings.
- C. This Item shall also include the removal of trees and shrubs and other landscape features, not designated for preservation and stumps, brush, roots, vegetation, logs, curb and gutter, driveways, paved parking areas, miscellaneous stone, sidewalks, drainage structures, manholes, inlets, abandoned railroad tracks, scrap iron and debris, whether above or below ground except live utility facilities.
- D. These obstructions do not include wells which shall not be removed unless specifically noted to be removed. Where wells are to remain in place, they shall be protected in accordance with appropriate state or county regulations.

G02.02 CONSTRUCTION METHODS

- A. General
 - 1. All areas, as shown on the plans, shall be cleared of all structures and obstructions as defined above. Those trees, shrubs and other landscape features specifically designated on the plans for preservation shall be carefully protected from abuse, marring, or damage during construction operations. Continual parking and/or servicing of equipment under branches of trees marked for preservation will not be permitted. When trees and shrubs are designated for preservation and require pruning, they shall be trimmed as directed by the Owner and all exposed cuts over 2 inches in diameter shall be treated with a material approved by the Owner or his representative.
 - 2. Culverts, storm sewers, manholes and inlets shall be removed in appropriate sequence for maintenance of traffic and drainage.

B. Disposal of Material

1. Unless otherwise shown on the plans, all materials and debris removed shall become the property of the Contractor, including all merchantable timber, and shall be removed from the right of way and disposed of in a manner satisfactory to the Owner.

C. Backfill

1. Holes remaining after removal of all obstructions, objectionable material, trees, stumps, etc., shall be backfilled with approved material, compacted and restored to its original contours by blading, bulldozing, or by other methods, as approved by the Owner. In areas to be immediately excavated, the backfilling of holes may not be required when approved by the Owner or his representative.
2. Before backfilling, the remaining ends of all abandoned storm sewers, culverts, sanitary sewers, conduits, and water or gas pipes over 3 inches in diameter, shall be plugged with an adequate quantity of concrete to form a tight closure or as otherwise stated.

G02.03 MEASUREMENT AND PAYMENT

- A. Preparation of right of way will be measured and paid for as provided for in the Proposal and Bid Schedule.

END OF SECTION

TECHNICAL SPECIFICATIONS

SECTION G03 - REMOVING AND REPLACING EXISTING PAVEMENT, DRIVEWAYS, SIDEWALKS AND PAVED WATERWAYS

G03.01 DESCRIPTION OF WORK

- A. This specification covers the requirements for removing and replacing existing pavement, driveways, sidewalks and paved waterways as shown in the plans and described herein.

G03.02 GENERAL

- A. Where it is necessary to remove pavement to allow the installation of the pipeline, the Contractor shall replace the pavement as specified herein.
- B. The existing pavement shall be removed for the width as shown in the plans for the particular type of pavement unless a greater width is authorized by the Engineer. Any pavement removed beyond the limits authorized shall be replaced by the Contractor and no separate payment will be made for replacement of the pavement beyond the authorized limits.
- C. Where damage to pavement beyond the authorized limits of removal occurs due to the construction of this project it shall be the responsibility of the Contractor to restore the damage prior to beginning construction. No separate payment will be made for the restoration of the damaged pavement.

G03.03 TRENCH BACKFILLING

- A. All trenches under or within 8 feet of existing concrete driveways, sidewalks, paved waterways, brick roadways, asphalt roadways, gravel roadways, shall be backfilled by mechanically tamping selected materials in six-inch (6") layers until full settlement is reached at the depths shown on the Plans.

G03.04 CONCRETE PAVEMENT AND CONCRETE CURB OR CURB AND VARIABLE WIDTH GUTTER

- A. Existing reinforced or un-reinforced concrete driveway shall be removed for the actual width of the trench plus twelve (12") inches on either side of the firm walls of the trench, and the reinforcing steel shall be cleaned and laid back. After the trench has been properly backfilled, the reinforcing steel shall be bent and spliced into place as shown on the Plans, and a concrete slab at least six inches (6"), shall be poured and finished to meet the existing pavement.
- B. Where the proposed work transverses an existing concrete curb or curb and variable width gutter, the curb or curb and variable width gutter shall be replaced to conform to the existing section, or as directed by the Engineer. The "Mule and Plaster" method of construction for curb and gutter will be allowed.

- C. Concrete used for replacing concrete pavement and concrete curb or curb and variable width gutter shall be 3,000 psi concrete.

G03.05

ASPHALTIC CONCRETE PAVEMENT, CONCRETE BASE WITH AN ASPHALT SURFACE, BRICK PAVEMENT OR GRAVEL BASE WITH AN ASPHALT SURFACE

- A. Existing asphaltic concrete pavement, concrete base with asphalt surface, brick pavement, and a gravel base with an asphalt surface shall be removed for the actual width of the trench plus twelve (12) inches on either side of the firm wall of the trench. After the trench has been properly embedded and backfilled with select material a gravel base 12" thick shall be placed, tamped and rolled to a level 1 ½ inches below the existing pavement surface. A tack coat of Grade RC-2 asphalt shall be applied to the gravel base before the placement of asphaltic concrete surfacing. Then a layer of an approved type of asphaltic concrete 1 ½ inches thick shall be placed, tamped, and rolled with a flat wheel roller to meet the existing pavement.

G03.06

GRAVEL ROADWAY

- A. After the trench has been properly backfilled where a gravel roadway has been cut, a minimum compacted thickness of eight (8") inches of an approved grade of fresh road gravel shall be placed on the full width of the trench and rolled with a flat wheel roller to meet the existing surface.

G03.07

MEASUREMENT AND PAYMENT

- A. No separate payment will be made for work performed in accordance with this section of the specifications, and the cost thereof shall be included in the appropriate item of the Proposal and Bid Schedule.

END OF SECTION

TECHNICAL SPECIFICATIONS

SECTION G10 - CONCRETE

G10.01 DESCRIPTION OF WORK

- A. This specification covers the requirements for the manufacture, transporting, placing, jointing, finishing and curing of concrete of the structures included in the plans and specified herein.

G10.02 GENERAL

A. Submittals

The Contractor shall submit the following for review by the Owner:

1. Concrete mix designs prepared by a testing laboratory acceptable to the Owner.
2. Joint filler technical data.
3. Curing materials technical data.
4. Layout of construction joints locations prior to the submittal of steel reinforcement shop drawings.
5. Sieve analysis of aggregates.
6. Los Angeles Machine test results.
7. Elastomeric waterproof coating technical data.

B. Standards

The following standard specifications are a part of these specifications:

- | | |
|-----------|---|
| ACI 301, | Specifications for Structural Concrete for Buildings. |
| ACI 347, | Recommended Practice for Concrete Formwork. |
| ACI 318, | Building Code Requirements for Reinforced Concrete. |
| ACI 305R, | Hot Weather Concreting. |
| ACI 306R, | Cold Weather Concreting. |
| ACI 308, | Standard Practice for Curing Concrete. |
| ACI 309, | Standard Practice for Consolidation of Concrete. |

- ACI 304, Guide for Measuring, Mixing, Transporting and Placing Concrete.
- ACI 304.2R, Placing Concrete by Pumping Methods.
- ACI 211.1, Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete.

G10.03 MATERIALS AND PRODUCTS

A. Portland Cement

ASTM C 150, Type I cement shall be used. Portland cement used shall be made by a well-known manufacturer and produced by not more than one plant.

B. Water

Mixing water shall be potable, unless approved by Owner.

C. Fine Aggregate

1. Fine aggregate shall conform to ASTM C 33 and shall consist of natural sand or a mixture of natural sand and not more than fifty percent (50%) of stone screenings.
2. Stone screenings shall consist of clean, hard, durable un-coated fragments resulting from the crushing of stone.
3. Fine aggregates shall be free of any materials that are deleteriously reactive with the alkalis in the cement.

D. Coarse Aggregate

1. Coarse aggregate shall conform to ASTM C 33 Size No. 467, No. 57 or No. 67 for all concrete in direct contact with sewage or sewage effluent. Size No. 7 may be used in other concrete.
2. Coarse aggregates shall be free of any materials that are deleteriously reactive with the alkalis in the cement.
3. Coarse aggregates shall have a percent of wear of not more than forty-five (45) as determined in accordance with ASTM C 131, Resistance to Abrasion of Small Size Coarse Aggregate by use of the Los Angeles Machine.

4. Nominal maximum size of coarse aggregate shall not be larger than one-fifth of the narrowest dimension between sides of the forms, one-third of the depth of slabs, or three-fourths of the minimum clear spacing between reinforcing bars.
5. Where lightweight structural concrete is indicated on the drawings, coarse aggregate shall conform to ASTM C 330.

E. Admixtures

1. Only admixtures produced by established reputable manufacturers and used in compliance with the manufacturer's printed instructions may be used.
2. Only admixtures which have been incorporated and tested in the accepted mixes shall be used unless otherwise authorized in writing by the Owner.
3. Concrete admixtures shall conform to the following specifications:
4. Air Entraining Admixtures - ASTM C 260.
5. Specifications for Chemical Admixtures for Concrete - ASTM C 494.
6. Use of calcium chloride is not permitted.

F. Curing Materials

1. Water shall meet requirements for concrete mixing water and shall not stain or leave unsightly residue.
2. Liquid curing materials shall conform to specifications for Liquid Membrane-Forming Compounds for Curing Concrete - ASTM 309.
3. Sheet materials shall conform to specifications for Sheet Materials for Curing Concrete - ASTM C 171.

G. Non-Shrink Grout

Non-shrink grout shall contain no iron filings and shall be Embeco Non-Shrink Mortar, Halco Non-Shrink Grout, or an approved equal.

G10.04 STORAGE AND HANDLING OF MATERIALS

- A. Sacked cement shall be stored in a suitable ventilated, weathertight building which will protect the cement from dampness and placed in such a manner that will permit easy access for proper inspection and identification of each shipment. Store cement clear from floor or ground to prevent absorption of moisture.

- B. Suitable means shall be taken during handling and storage of aggregates to insure that intrusion of foreign materials and segregation of the coarse and fine aggregates does not occur and the grading is not affected. Store on wooden platforms, metal sheets or similar material; if stored on the ground, the sites of stockpiles shall be grubbed, cleaned of all vegetation and leveled off, the bottom six (6) inch layer of aggregate shall not be disturbed and shall not be used in the work.
- C. At the time of use, aggregates shall be free from frozen or foreign material, such as grass, wood, sticks, burlap, paper or dirt which may have become mixed with the aggregate in stockpiles or in handling.
- D. Where coarse aggregates are delivered to the job in two (2) or more sizes or types, each size or type shall be kept separate and not mixed prior to matching.

G10.05 PROPORTIONING AND DESIGN OF MIXES

- A. It shall be the responsibility of the Contractor to design the proportions of the concrete mixes within the limits indicated in Table "A" to produce concrete of the consistency and workability required, and to conform to the strength requirements specified.
- B. Concrete proportions shall be established on the basis of previous field experience or laboratory trial mixtures as specified in ACI 301, Chapter 3.

TABLE "A"

Class Concrete	"Minimum or Required 28-Day Compressive Strength, PSI (See Quality Control)	Minimum Factor, Sacks Cement (94-lbs) per C.Y. Concrete	Maximum Water per 94 lbs. Cement, Gallons*	Maximum Water per 94 lbs. Cement, Gallons**	Maximum Size of Aggregate	Slump Range In.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
"A"	4,000	6.00	5.2	N/A	1½"	4"-6"
"B"	3,000	5.00	7.0	7.5	1½"	4"-6"
"C"	2,000	4.50	6.5	8.0	3"	2"-6"

* With air-entraining agent added.

** Without air-entraining agent added.

- C. Class "A" concrete, as indicated in Table "A" shall be used for all reinforced concrete work included in this contract except as otherwise indicated on the Plans or as hereinafter provided.
- D. The maximum quantity of water per 94 pounds of cement as specified shall include the free water in the aggregates, not including moisture absorbed by the aggregates.
- E. In proportioning the mix and establishing the permissible slump, the Contractor shall make allowances for the water reducing potential of the admixtures, if used in the concrete, and to the use of high frequency mechanical vibration for compacting the concrete.
- F. Mix designs shall be proportioned to result in concrete slump at the point of placement as specified in Table "A".
- G. Contractor shall use an independent testing facility acceptable to the Owner for preparing and reporting proposed mix designs.

- H. Written reports of proposed concrete mixes shall be submitted to the Owner at least 15 days prior to the start of work. The Contractor shall not begin concrete production until mixes have been reviewed by the Owner. Review of the mix design does not relieve the Contractor of the responsibility for meeting all requirements specified herein.
- I. Adjustments to concrete mix designs may be requested by the Contractor when characteristics of materials, job conditions, weather, test results or other circumstances warrant; at no additional cost to and when acceptable to the Owner. Laboratory test data for revised mix designs and strength results shall be submitted to and accepted by the Owner before using the revised mixes.

G16.06 FORMING OF CONCRETE

A. General

1. Design and construction of all form work is the responsibility of the Contractor.
2. For all surfaces which are exposed in the finished work, forms shall be of steel, metal surfaces on wood, plywood, pressed boards, or well-seasoned boards, dressed all over and smooth. They shall be so built that when removed, the concrete will be left free from offsets, fins, ridges, or other unsightly defects.
3. Formwork shall be constructed so as to ensure that the concrete surfaces will conform to the tolerances of Section 3.3.1, "Recommended Practice for Concrete Formwork" (ACI 347). Forms shall be sufficiently tight to prevent leakage of mortar. The size and spacing of studs and wales shall be determined by the nature of the work and the height to which concrete is placed. Joints shall be snug, and shall occur at the designated locations only.
4. All forms shall be cleaned and inspected immediately prior to placing concrete. Deformed, broken, or defective forms shall be removed from the work. Temporary openings shall be provided where necessary to facilitate cleaning and inspection just prior to placing concrete.
5. Should the forms show any sign of yielding, spreading or otherwise becoming displaced from correct alignment of position during or after the placing of concrete, they shall be corrected immediately by adjustment or bracing to the extent necessary, or, if required, shall be removed in part or in their entirety and rebuilt or reset.
6. The entire inside surfaces of forms shall be oiled with an approved, non-toxic form oil, or shall be thoroughly wetted just prior to placing concrete.
7. All exposed corners and edges shall have a formed $\frac{3}{4}$ -inch chamfer unless otherwise indicated on the Plans.
8. The Contractor shall provide openings in formwork to accommodate the work under this and other sections and build into the formwork all items

such as sleeves, anchor bolts, inserts and all other items to be embedded in concrete for which placement is not specifically provided under other Sections.

B. Plain Sheathing Forms

1. Wooden forms for surfaces not exposed to view may be built of sound No. 1 yellow pine, Douglas fir, or equivalent acceptable lumber, dressed on all sides and neatly fitted. Matched lumber, shiplap, or other satisfactory joint lumber shall be used throughout, and tongue and grooved material shall be used where required.
2. The sheathing shall be erected in level random courses. All vertical joints shall be squared, and all horizontal joints shall be level and matched throughout the entire job. Except for panel forms, vertical joints shall not exceed the width of one board and shall be staggered at least thirty-two inches (32") and made on the center of a stud. Inside forms shall not be placed until exterior forms have been checked, or vice versa.
3. Forms for beam and girder soffits shall be constructed with nominal 2-inch lumber, and all joints shall be tight and even. Beam and girder soffits shall be sufficiently braced, shored, and wedged to prevent deflection.

C. Plywood Forms

Forms for all interior exposed concrete surfaces and designated areas of exterior exposed concrete surfaces shall be constructed with minimum thickness 3/4-inch plywood for straight sections and 1/2-inch plywood for curved sections. Plywood shall be made with a waterproof glue and manufactured especially for concrete form work. Edges shall be square in both directions and adjoining panels shall match in thickness, width, and length. Full size sheets of plywood shall be used, except where otherwise required or where smaller pieces will cover an entire area. Forms shall be placed so that markings will be symmetrical. Plywood shall be thoroughly oiled on contact faces and edges with raw linseed oil or other approved form lacquer. Surplus oil shall be wiped off forms before reinforcing steel is placed and while the surfaces are accessible.

D. Steel Forms

If steel forms are proposed, they shall be approved prior to use. The forms shall be accurately constructed in a standard size and in such minor multiple widths and lengths as required. Steel forms shall be coated before each use, with a light, clear, paraffin-base oil, or other acceptable commercial preparation which will not discolor the concrete. Plates shall be wire brushed after each use.

E. Carton Forms

1. Where indicated on the Plans, a structural void at least 6 inches deep shall be provided between the earth and concrete through the use of carton forms which will remain in place and retain their strength until after the concrete has cured. Forms shall be corrugated fiberboard carton forms as manufactured by the Container Corporation of America and fabricated by Savway Concrete Forms, Inc., Dallas, Texas or approved equal.
2. The cover, ribs, and caps of forms shall be constructed of durable-wall corrugated fiberboard, laminated with waterproof adhesive. Covers and end caps shall be coated on the outside with paraffin containing polyethylene. All fabricated forms shall be capable of supporting a minimum load of 150 pounds per square foot.
3. Forms shall be securely held in position and protected from excessive moisture or other damage prior to and during the concreting operation. Free falls of wet concrete in excess of 2 feet, 6 inches will not be permitted on carton forms.
4. Voids below grade beams, walls, and slabs shall be closed by a monolithic extension of the concrete member at its edges, or by precast concrete blocks which extend at least 6 inches into the subgrade to retain the adjacent soil.

F. Form Ties

Only form ties, hangers, and clamps indicated on the forming plans shall be used, and they shall be of such type that no metal will be closer than 1½ inches from the surface. Wire ties will not be permitted. The assembly should provide cone-shaped depressions at the forms at the surface at least one (1) inch in diameter and 1½ inches deep to allow filling and patching. The spacing of form ties, hangers, and clamps shall be strictly in accordance with manufacturer's directions.

G. Removal of Forms

In general, forms shall not be removed until the concrete has hardened sufficiently to support its own load safely plus any superimposed loads that might be placed thereon. In any event, forms shall be left in place at least the minimum required length of time specified below, after the placing of concrete in them:

Columns	48 hours
Side forms for girders and beams	48 hours
Bottom forms of slabs	7 days
Bottom forms of beams and girders.....	7 days
Walls.....	48 hours

G16.07 MIXING AND PRODUCTION OF CONCRETE

A. General

1. All concrete not placed in the work within forty-five (45) minutes after addition of water to batch shall be rejected and disposed of by the Contractor at his own cost and expense.
2. The Contractor shall provide access to the mixing plant for inspection by the Owner.

B. Ready Mix Concrete

1. All ready mix concrete shall be batched, mixed and transported in accordance with ASTM C 94.
2. Plant equipment and facilities shall conform to National Ready-Mix Concrete Association "Plan and Delivery Equipment Specification."
3. The production and delivery of ready-mixed concrete shall be such that will provide a continuous finishing operation and in no case more than twenty (20) minutes shall elapse between the depositing of successive batches of concrete in any monolithic unit.

C. Job Site Mixing

Site batched and mixed concrete shall comply with the recommendations of ACI 301, Chapter 7.

D. Control of Admixtures

1. Admixtures shall be charged into the mixer as solutions and shall be measured by means of an acceptable mechanical dispensing device. The liquid shall be considered a part of the mixing water.
2. If two or more admixtures are used, they shall be added separately to avoid possible interaction.
3. Addition of retarding admixtures shall be completed within one (1) minute after addition of water to the cement has been completed, or prior to the beginning of the last three-quarters of the required mixing, which ever occurs first.

E. Cold and Hot Weather Requirements

1. The Contractor shall comply with requirements of ACI 305 "Recommended Practice for Hot Weather Concreting" during hot weather conditions and when ambient temperature is 90 degrees F or above. Concrete deposited in hot weather shall have a placing temperature (not exceeding 90 degrees F) which will not cause difficulty in loss of slump, flash set or cold joints. The ingredients shall be cooled before mixing, or well crushed ice may be substituted for all or part of the mixing water if, due to high temperatures or other climatic factors, any undesirable effects are encountered. Cement shall not be added to the mixtures of water and aggregate when the temperature of the mixture is greater than 100 degrees F.
2. The Contractor shall comply with requirements of ACI 306 during cold weather conditions. Unless the temperature is at least 40 degrees F and rising, the temperature of the concrete when placed shall be at least 55 degrees F. If water or aggregate has been heated, the water shall be combined with the aggregate in the mixer before cement is added.

G16.08 PLACING CONCRETE

A. Preparation Before Placing

1. Before placing of concrete in any portion of a structure, adequate provision shall be made for walkways from which the concrete to be placed can be worked or runways over which the concrete may be transported in buggies, when such are to be used. Buggy runways shall be clear of the reinforcements in slabs or footings. Runways or walkways used for placing or working concrete in walls shall be properly supported and adequate in width for safe use by workmen. Runways shall provide convenient access to the entire length of wall in which concrete is being placed. Hand rails shall be installed on walkways or runways in accordance with OSHA Standards.
2. The Contractor shall remove frost, snow, ice, water and any other foreign materials from forms, secure reinforcement in place, and position joint materials and other embedded items.
3. In cold weather, the Contractor shall have protective blankets ready and heaters operational and in-place prior to placing concrete.
4. In hot weather, when temperature of reinforcing or forms is above 120 degrees F, the Contractor shall spray forms and reinforcement with water just prior to placing concrete.

5. Structural concrete shall be placed only on a firm and unyielding subgrade or sub-base, which is free from all loose material and debris. Subgrade shall be free of frost. The Contractor shall keep subgrade moist at time of concreting. If necessary, dampen with water in advance of concreting. The Contractor shall allow no free water standing on subgrade nor any muddy or soft spots when concrete is placed.

B. Conveying and Depositing in Forms

1. The Contractor shall handle concrete from mixer to place of final deposit as rapidly as practicable by methods which prevent segregation or loss of ingredients to assure that quality is maintained.
2. To prevent segregation, the Contractor shall deposit concrete in approximately horizontal layers of 18 to 24 inches as near as possible to its final position.
3. Concrete shall not be allowed to drop freely more than four (4) feet or through a cage of reinforcing steel.
4. Chutes used to transport concrete shall have a slope not exceeding one vertical to two horizontal and not less than one vertical to three horizontal. The end of each chute shall be provided with a baffle to help prevent segregation, or the concrete shall be discharged through a tremie or elephant trunk directly into the form.
5. Pumping equipment shall be a suitable type with adequate pumping capacity. Loss of slump in pumping shall not exceed 1½ inches.
6. The Contractor shall consolidate all concrete by vibration, so that concrete is thoroughly worked around reinforcement, around embedded items and into corners of forms eliminating all air or stone pockets which may cause honeycombing, pitting, or places of weakness. The Contractor shall use internal vibrators having a minimum frequency of 8,000 vibrations per minute to consolidate concrete effectively. The Contractor shall not use vibrators to transport concrete within forms. The Contractor shall insert vibrators and withdraw at points approximately 18 inches apart. At each insertion, the Contractor shall allow duration sufficient to consolidate concrete but not sufficient to cause segregation; generally from 5 to 15 seconds. Where concrete is to have an as-cast finish, bring a full surface of mortar against form by vibration process, supplemented if necessary by spading, to work coarse aggregate back from formed surface.
7. While concrete is being placed adjacent to a joint in which a waterstop is specified, care shall be taken to see that the concrete is properly placed and worked along the joint in which the waterstop is held and that the waterstop itself is in the position specified on the drawings and is firmly bedded in mortar on all sides.
8. The concrete comprising each section of wall between joints shall be deposited continuously in layers of such thickness that none will be

deposited on concrete which has hardened sufficiently to cause the formation of seams or places of weakness within the section.

C. Joints

1. Joints shall be provided in slabs on grade; locate joints as indicated. If saw cut joints are required or permitted, time cutting properly with set of concrete; start cutting as soon as concrete has hardened sufficiently to prevent aggregates from being dislodged by saw. Complete before shrinkage stresses produce cracking.
2. Other construction joints, not indicated on drawings, shall be located so as to least impair strength of the structure. Place joints in locations approved by the Owner.
3. Vertical construction joints shall be prepared and bonded in accordance with ACI 301, Chapter 6.

G16.09 FINISH OF CONCRETE SURFACES

A. Scope

The provisions of this subsection shall apply to all exposed exterior concrete surfaces and all interior concrete surfaces of conduits and structures whose finish is not specified elsewhere in these specifications or specifically indicated on the Plans.

B. General

1. The exposed tops of walls of structures shall be brought to true level, floated to bring a workable grout to the surface, struck off and releveled where necessary with cement grout of the same proportions as the mortar of the concrete. The wall tops shall then be floated, finished and edged unless otherwise indicated on the Plans. The edger used shall be of ½-inch radius and shall have its flanges ground to a knife edge so as to have as little burr as possible.
2. Slabs shall be edged as appropriate.

C. Finish of Formed Surfaces

1. General

- a. Unless otherwise noted on the drawings, the following finishes shall be used as applicable:
- b. Rough form finish - For exterior wall surfaces of structures, flumes and conduits not exposed to public view up to one foot below grade.

- c. Smooth rubbed finish (or paint type finish at Contractor's option) - For exterior wall surfaces exposed to view and interior wall surfaces of structures, flumes and conduits. Interior wall surfaces which shall receive the Smooth Rubbed Finish shall be all interior surfaces to a point one (1) foot below the minimum water surface of open vessels containing liquids. Surfaces one foot or more below minimum water surface elevation in vessels containing liquids shall receive a Rough Form Finish. Apply the same finish on all surfaces.

2. Rough Form Finish

Tie holes and defects shall be patched. Fins exceeding ¼-inch shall be chipped or rubbed off. Otherwise, surfaces shall be left with the texture imparted by forms.

3. Smooth Form Finish

- a. Use form facing materials which shall produce a smooth, hard, uniform texture on the concrete. Arrange panels in an orderly and symmetrical manner with a minimum of seams.
- b. Tie holes and defects shall be patched and all fins shall be completely removed.

4. Smooth Rubbed Finish

- a. Provide smooth rubbed finish to surfaces which have received smooth form finish.
- b. Surfaces to be rub-finished shall be thoroughly wetted and kept in that condition until the rubbing work of each section is completed.
- c. Surfaces shall be rubbed with carborundum blocking or other abrasive and water until fins and any surplus materials have been removed and the surface is uniformly smooth. Grout or mortar shall not be used in the rubbing process and plastering of the surfaces will not be permitted. Rubbing blocks shall be driven by electric or compressed air tools except as hand rubbing is specifically permitted by the Owner.
- d. Rubbing of concrete surfaces shall commence within one (1) day after removal of forms.

5. Paint Type Finish

Finish shall be Elastomeric Waterproofing Coating 10 as manufactured by Sherwin Williams or approved equal. Apply one coat in accordance with manufacturer's recommendations, at a coverage of fifty (50) square feet per gallon.

D. Finish of Unformed Surfaces

1. Unless otherwise noted on the drawings, the following finishes shall be used as applicable:
2. Floated Finish - Top surfaces of slabs of all structures, water carrying conduits and liquid containers; surfaces intended to receive roofing, waterproofing membranes or sand bed terrazzo.
3. Troweled Finish - Interior floors intended as walking surfaces or for reception of floor coverings.
4. Non-Slip Broom Finish - Sidewalks, ramps and concrete paved areas (other than roadways and parking area); exterior platforms, steps and landings; exterior and interior pedestrian ramps, exposed floor areas and steps likely to be wet.

E. Finishing Tolerances

1. The following finishing tolerances shall be provided:
2. Class A Tolerance - Finishes shall be true planes within $\frac{1}{8}$ -inch in ten (10) feet as determined by a 10-foot straightedge placed anywhere on the slab in any direction.
3. Class B Tolerance - Finishes shall be true planes within $\frac{1}{4}$ -inch in ten (10) feet as determined by a 10-foot straightedge placed anywhere on the slab in any direction.
4. Class C Tolerance - Finishes shall be true planes within $\frac{1}{4}$ -inch in two (2) feet as determined by a 2-foot straightedge placed anywhere on the slab in any direction.
5. Tolerances shall be checked with a 10-foot straightedge for Class A or B tolerance and with a 2-foot straightedge for Class C tolerance applied at no less than two different angles.

F. Floated Finish

The top of the slab shall be screeded to grade and cross section. Concrete shall not be worked further until ready for floating. Begin floating when water sheen has disappeared and when surface has stiffened sufficiently to permit operation of float. Use a wood float only. Float to a surface within Class C tolerance. No further finish will be required on top slabs of structures of conduits which are to be buried. For all other slabs, float to a surface within Class B tolerance and refloat immediately to a uniform sandy texture.

G. Troweled Finish

1. Surface shall first receive floated finish. It shall next be power troweled, and finally hand troweled. Begin final troweling when the surface produces a ringing sound as trowel is moved over surface.
2. Finished surface shall be essentially free of trowel marks, and uniform in texture and appearance. Interior floor surfaces of administrative and similar areas shall be plane to a Class A tolerance. Other surfaces shall be plane to a Class B tolerance.

H. Nonslip Broom Finish

Immediately after the concrete has received a floated finish, it shall be given a coarse transverse scored texture by drawing a fiber-bristle broom across the surface.

G16.10 CURING AND PROTECTION OF CONCRETE

A. General

1. Curing shall commence immediately following initial set or completion of surface finishing.
2. Standard Portland cement concrete surfaces normally exposed to the atmosphere shall be protected against too rapid drying by curing for a minimum period of seven (7) days. Similarly exposed high-early-strength concrete surfaces shall be cured for a minimum period of three (3) days.

B. Curing of Formed Surfaces

The Contractor shall cure formed surfaces, including the undersides of beams, supported slabs and other similar surfaces by moist curing. Minimize moisture loss from surfaces placed against forms by keeping forms wet until they can be safely removed. After form removal cure concrete until end of time prescribed. Vertical surfaces shall be protected from too rapid drying by covering with burlap.

C. Curing of Unformed Surfaces

1. For concrete surfaces not in contact with forms, one of the following procedures shall be applied immediately after completion of placement and finishing:
2. Ponding or continuous sprinkling.
3. Application of waterproof sheet materials conforming to ASTM C 171.
4. Application of curing compound conforming to ASTM C 309.
5. Apply curing materials in accordance with manufacturer's recommendations.
6. Apply curing compound immediately after water sheen has disappeared from surface. Curing compound shall not be used on any surface against which additional concrete or other material is to be bonded.
7. Curing materials shall, when tested in accordance with the method of "Test for Water Retention Efficiency of Liquid Membrane-Forming Compounds and Impermeable Sheet Materials for Curing Concrete", ASTM C 156, be effective in limiting the water loss in the concrete test specimens to 3½ percent when applied at the rate recommended by the manufacturer.

D. Protection From Mechanical Injury

1. During the curing period, protect concrete from damaging mechanical disturbances, such as load stresses, heavy shock, and excessive vibration, and from damage by rain or flowing water.
2. Protect all finished concrete from damage by subsequent construction operations.

G16.11 CONCRETE REPAIRS

- A. All honeycomb, rock pockets and voids over ½-inch diameter shall be removed down to sound concrete. The area to be patched and an area at least six inches wide surrounding it shall be dampened to prevent absorption of water from the patching mortar.
- B. A bonding grout of 1 part cement to 1 part fine sand passing the No. 30 sieve, mixed to the consistency of thick cream, shall be brushed into the surface after surface water has evaporated. The patching mixture shall be made of the same materials as the concrete, except that the coarse aggregate shall be omitted and the mortar shall consist of not more than 1 part cement to 2½ parts sand by damp loose volume. The quantity of mixing water shall be no more than necessary for handling and placing. Patching mortar shall be mixed and allowed to stand with frequent manipulation with a trowel until it has reached the stiffest consistency that will permit placing.

- C. Apply patching mortar when bonding grout begins to lose water sheen. Mortar shall be thoroughly consolidated and struck off leaving patch slightly higher than surrounding area. Finish and cure in same manner as adjacent concrete.
- D. The Contractor shall thoroughly clean and dampen all tie holes.
- E. Tie holes shall be grouted solid with non-metallic non-shrinking grout. Tie holes shall be filled from the large end of the cone-shaped hole and packed solid by rodding.

G16.12 QUALITY CONTROL

A. Tests on Concrete

1. As the work progresses, concrete shall be sampled in accordance with ASTM Method of Sampling Fresh Concrete (ASTM C 172).
2. Slump tests shall be made according to ASTM Method of Test for Slump of Portland Cement Concrete (ASTM C 143).
3. Compression test specimens shall be made and cured according to ASTM Method of Mixing and Curing Concrete Test Specimens in the Field (ASTM C 31). Not less than four compression specimens shall be made for each test at each age (Specifications for Ready-Mixed Concrete, ASTM C 94), nor less than one test for each 50 cubic yards of concrete of each class. At least one test per day shall be made for each class of concrete used that day. These specimens shall be cured under laboratory conditions. Additional specimens cured under job conditions may be required when, in the opinion of the Engineer, there is a possibility of the surrounding air temperature falling below 40 degrees F or rising above 90 degrees F.
4. Specimens shall be tested according to ASTM Method of Test for Compressive Strength of Cylindrical Concrete Cylinders (ASTM C 39).
5. Not less than two specimens shall be tested at seven (7) days and not less than two specimens at twenty-eight (28) days after pouring.
6. If the average strength of any three consecutive tests of laboratory-cured cylinders representing each class of concrete falls below required compressive strengths as indicated in Table "A", or if more than 10 percent of strength tests have values less than the required strength, the Owner shall have the right to order a change in the mix proportions for the remaining portion of the structure or project. If the average strength of the job-cured cylinders falls below the required strength, the Owner shall have the right to require changes in conditions of temperature and moisture necessary to secure the required strength. He may require test in accordance with ASTM Methods of Obtaining and Testing Drilled Cores and Sawed Beams of Concrete (ASTM C 42) or order load tests to be made on the portions of the structures so affected.

7. In the event that changes are required in the water-cement ratio specified, the cost of such changes shall be borne by the Contractor.
8. Contractor shall furnish samples of aggregates to the testing laboratory. All concrete required for testing shall be furnished by the Contractor. No additional compensation will be paid the Contractor for concrete so used.
9. Owner shall normally pay for services of testing laboratory in connection with test made in the field or laboratory on concrete. Any testing or retesting required as a result of actual or apparent failure of concrete to fulfill specification requirements shall be paid for by the Contractor.

B. Acceptance of Work

1. Completed concrete work which fails to meet one or more requirements of this specification will be considered rejected until it has been repaired in a manner acceptable to the Owner.
2. If rejected concrete work cannot be brought into compliance by repairing, work may be remedied by one of the following:
 - a. Structural analysis or testing when strength of structure is deficient.
 - b. Removal and replacement of concrete.
 - c. Reinforcement of the structure.
 - d. Contractor shall pay all costs of additional testing and/or engineering at no additional expense to Owner.
3. Contractor shall repair or replace rejected work at no additional cost to Owner.
4. Failure to detect any defective work shall not in any way prevent later rejection when such defect is discovered.

G16.13 MEASUREMENT AND PAYMENT

- A. No separate payment will be made for work in accordance with this section of the specifications, and the cost thereof shall be included in the proper item of the Proposal and Bid Schedule.
- B. The placement of concrete in excess of that shown in the Plans, which is approved in writing in advance by the Owner, will be paid for under the proper items in the Proposal and Bid Schedule.

END OF SECTION